Health Indicators and Risk Estimates by Community Health Assessment Regions & Local Health Departments

Michigan Behavioral Risk Factor Survey 2002 - 2006 Combined

Selected Tables

Chronic Disease Epidemiology Section Bureau of Epidemiology Michigan Department of Community Health

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<u>Introduction</u>

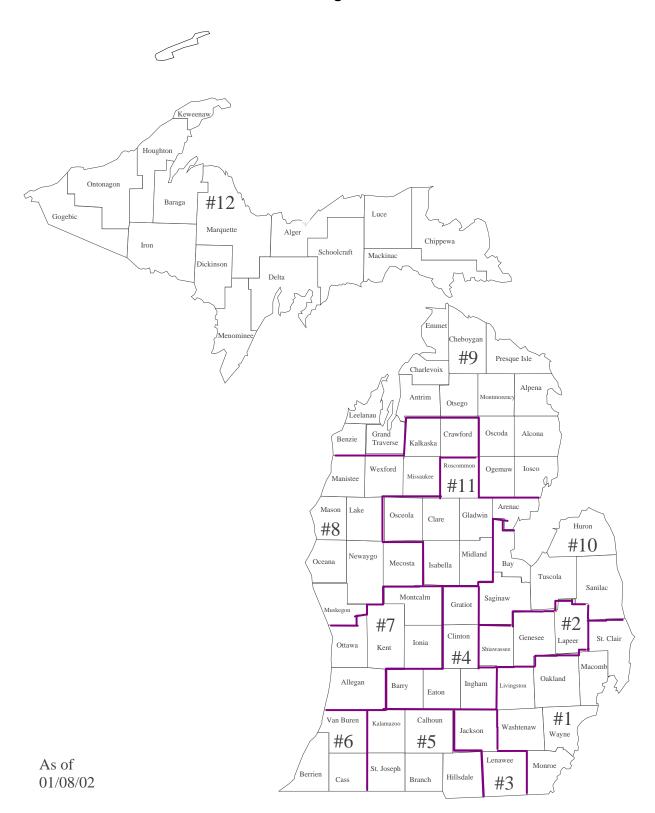
The Michigan Behavioral Risk Factor Survey (BRFS) is a statewide, random-digit dialed telephone survey of adult residents aged 18 years and older. State-specific, population-based prevalence estimates (and 95% confidence intervals) of health risk behaviors, preventive health practices, and chronic conditions are calculated yearly (see Annual Tables at http://www.michigan.gov/brfs), and region-specific and local health department-specific prevalence rates are usually computed using five years of combined data.

For this report, data from the 2002 - 2006 Michigan BRFS were combined. The total sample sizes by year were: 5,662 in 2006, 12,136 in 2005, 4,943 in 2004, 3,551 in 2003, and 5,934 in 2002. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

Estimates have been weighted to adjust for the probabilities of selection and the distribution of Michigan adults by age, sex, and race-ethnicity at the state level. Final annual analysis weights were used; no additional weighting factors have been computed for the regional or local health department level. These analyses were performed in SUDAAN, a statistical computing program that was designed for complex sample surveys. Estimates are reported for geographic subgroups with a sample size of at least 50 respondents.

If you have any questions about these data, please contact the Chronic Disease Epidemiology Section at 517-335-9080.

Community Health Assessment and Improvement Regions State of Michigan



Local Health Departments State of Michigan



2002 - 2006 Michigan BRFS Regional & Local Health Department Estimates November 19, 2007

Table 1: Health Status Michigan BRFSS, 2003-2006 Combined				
Geographic Area		General Health, Fair or Poor ^a		
	n	%	95% Confidence Interval	
Michigan Total	32,139	14.7	(14.3 – 15.2)	
Region 1	12,227	14.3	(13.6 – 15.0)	
Livingston	496	7.4	(5.3 – 10.3)	
Macomb	1,937	14.4	(12.8 – 16.3)	
Monroe	478	15.1	(11.7 – 19.4)	
Oakland	3,300	10.6	(9.5 – 11.9)	
St. Clair	519	15.0	(11.8 – 18.8)	
Washtenaw	1,023	8.3	(6.5 – 10.5)	
City of Detroit	1,688	22.9	(20.6 – 25.3)	
Wayne exc. Detroit	2,739	14.7	(13.2 – 16.3)	
Region 2	1,839	15.9	(14.1 – 17.8)	
Genesee	1,317	15.7	(13.6 – 18.1)	
Lapeer	273	12.8	(9.1 – 17.6)	
Shiawassee	249	20.3	(15.2 – 26.5)	
Region 3	877	16.4	(13.8 – 19.4)	
Jackson	539	18.0	(14.7 – 21.9)	
Lenawee	338	13.9	(10.0 – 19.0)	
Region 4	2,059	13.3	(11.7 – 15.0)	
Barry-Eaton	644	13.3	(10.7 – 16.4)	
Mid-Michigan ^b	687	14.9	(12.2 – 18.0)	
Ingham	986	13.4	(11.2 – 15.9)	
Region 5	1,816	16.7	(14.7 – 18.9)	
Branch-Hillsdale-St. Joseph	529	19.6	(15.8 – 24.0)	
Calhoun	485	18.5	(14.9 – 22.6)	
Kalamazoo	802	13.7	(11.0 – 17.0)	
Region 6	1,064	16.9	(14.5 – 19.6)	
Van Buren-Cass	459	16.7	(13.2 – 21.0)	
Berrien	605	17.1	(14.0 – 20.8)	
Region 7	4,445	11.1	(10.0 – 12.2)	
Allegan	387	11.5	(8.7 – 15.1)	
Ionia	238	16.3	(11.5 – 22.7)	
Kent	2,688	10.6	(9.3 – 12.1)	
Mid-Michigan ^b	687	14.9	(12.2 – 18.0)	
Ottawa	874	8.4	(6.6 - 10.7)	

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Table 1 Cont'd			
Geographic Area	General Health, Fair or Poor ^a		
	n	%	95% Confidence Interval
Michigan Total	32,139	14.7	(14.3 – 15.2)
Region 8	1,650	18.3	(16.2 – 20.5)
District #10	1,065	19.5	(16.9 – 22.5)
Muskegon	585	16.2	(13.2 – 19.9)
Region 9	1,744	16.0	(14.2 – 18.0)
District #2	343	21.5	(17.0 – 26.7)
District #4	394	20.2	(16.0 – 25.2)
Northwest Michigan	496	15.7	(12.5 – 19.6)
Benzie-Leelanau	192	9.6	(5.8 – 15.5)
Grand Traverse	319	9.5	(6.7 - 13.3)
Region 10	1,560	15.5	(13.6 – 17.5)
Вау	383	14.5	(10.9 – 19.0)
Huron	132	14.6	(9.4 - 21.9)
Saginaw	671	15.6	(12.8 – 18.9)
Sanilac	172	18.9	(13.3 - 26.0)
Tuscola	202	14.9	(10.4 – 20.8)
Region 11	1,507	15.6	(13.4 – 18.1)
Central Michigan	753	17.7	(14.8 – 21.1)
Midland	754	11.4	(8.5 – 15.1)
Region 12	1,351	17.3	(15.2 – 19.7)
Luce-Mackinac-Alger-Schoolcraft	176	18.0	(12.4 – 25.5)
Western Upper Peninsula	280	18.4	(13.7 – 24.4)
Delta-Menominee	299	15.3	(11.2 – 20.4)
Chippewa	138	23.8	(16.6 – 32.9)
Dickinson-Iron	200	19.4	(14.3 – 25.9)
Marquette	258	12.6	(9.1 – 17.2)

^a The proportion who reported that their health, in general, was either fair or poor.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 2: Poor Physical Health on at Least 14 Days in the Past Month Michigan BRFSS, 2003-2006 Combined			
Geographic Area	Poor Physical Health ^a		
	n	%	95% Confidence Interval
Michigan Total	25,833	11.0	(10.6 – 11.5)
Region 1	10,269	10.9	(10.2 – 11.6)
Livingston	424	8.0	(5.6 – 11.5)
Macomb	1,625	11.1	(9.6 – 12.8)
Monroe	407	11.9	(8.9 – 15.7)
Oakland	2,792	9.7	(8.5 – 11.1)
St. Clair	436	11.8	(9.0 – 15.5)
Washtenaw	864	7.7	(5.9 – 10.1)
City of Detroit	1,367	14.1	(12.2 – 16.3)
Wayne exc. Detroit	2,317	11.0	(9.7 – 12.5)
Region 2	1,521	12.0	(10.3 – 14.0)
Genesee	1,081	12.5	(10.5 – 14.8)
Lapeer	233	9.6	(6.3 – 14.5)
Shiawassee	207	12.2	(7.7 – 18.9)
Region 3	734	12.6	(10.3 – 15.4)
Jackson	450	12.4	(9.6 – 15.8)
Lenawee	284	12.9	(9.0 – 18.2)
Region 4	1,745	9.0	(7.6 – 10.6)
Barry-Eaton	550	7.0	(5.2 - 9.3)
Mid-Michigan ^b	572	9.4	(7.1 – 12.4)
Ingham	840	10.3	(8.1 – 12.9)
Region 5	1,500	11.3	(9.6 – 13.2)
Branch-Hillsdale-St. Joseph	432	13.9	(10.7 – 17.8)
Calhoun	391	12.5	(9.3 – 16.7)
Kalamazoo	677	8.9	(6.7 – 11.6)
Region 6	886	10.2	(8.1 – 12.7)
Van Buren-Cass	385	9.2	(6.3 – 13.1)
Berrien	501	10.9	(8.2 – 14.4)
Region 7	2,989	9.1	(8.0 – 10.3)
Allegan	316	11.4	(8.0 – 16.1)
Ionia	190	9.9	(5.9 – 16.2)
Kent	1,519	9.4	(7.8 – 11.2)
Mid-Michigan ^b	572	9.4	(7.1 – 12.4)
Ottawa	747	7.1	(5.4 - 9.2)

2002 - 2006 Michigan BRFS Regional & Local Health Department Estimates November 19, 2007

Table 2 Cont'd			
Geographic Area	Poor Physical Health ^a		
	n	%	95% Confidence Interval
Michigan Total	25,833	11.0	(10.6 – 11.5)
Region 8	1,387	14.1	(12.1 – 16.3)
District #10	898	15.0	(12.5 – 18.0)
Muskegon	489	12.5	(9.8 – 15.8)
Region 9	1,473	13.1	(11.3 – 15.1)
District #2	288	16.0	(12.1 – 20.8)
District #4	330	13.6	(9.9 - 18.2)
Northwest Michigan	423	14.7	(11.3 – 18.9)
Benzie-Leelanau	162	12.5	(7.6 - 20.0)
Grand Traverse	270	7.5	(5.0 – 11.1)
Region 10	1,291	10.8	(9.2 - 12.8)
Bay	323	11.6	(8.2 – 16.1)
Huron	105	9.4	(4.8 - 17.6)
Saginaw	556	11.3	(8.9 - 14.4)
Sanilac	141	11.3	(7.3 – 17.1)
Tuscola	166	8.1	(5.1 – 12.7)
Region 11	908	11.4	(9.4 - 13.8)
Central Michigan	626	12.5	(10.0 – 15.6)
Midland	282	9.1	(6.1 – 13.3)
Region 12	1,130	12.5	(10.4 – 14.8)
Luce-Mackinac-Alger-Schoolcraft	148	11.4	(6.3 – 19.8)
Western Upper Peninsula	241	14.7	(10.1 – 20.8)
Delta-Menominee	252	12.6	(8.7 – 17.9)
Chippewa	115	8.7	(4.6 – 15.8)
Dickinson-Iron	162	12.8	(8.4 – 19.1)
Marquette	212	12.3	(8.2 - 18.2)

^a The proportion who reported 14 or more days, out of the previous 30, on which their physical health was not

good, which includes physical illness and injury.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 3: Poor Mental Health on at Least 14 Days in the Past Month Michigan BRFSS, 2003-2006 Combined			
Geographic Area	Poor Mental Health ^a		
	n	%	95% Confidence Interval
Michigan Total	25,903	11.0	(10.6 – 11.5)
Region 1	10,285	11.4	(10.7 – 12.2)
Livingston	427	6.3	(3.9 - 9.9)
Macomb	1,636	12.1	(10.3 – 14.1)
Monroe	404	15.0	(11.0 – 20.1)
Oakland	2,802	9.6	(8.3 – 11.0)
St. Clair	440	14.0	(10.7 – 18.2)
Washtenaw	859	8.9	(6.7 – 11.8)
City of Detroit	1,362	12.8	(10.8 – 15.0)
Wayne exc. Detroit	2,317	12.9	(11.4 – 14.7)
Region 2	1,531	11.5	(9.7 – 13.5)
Genesee	1,094	11.3	(9.4 – 13.7)
Lapeer	231	9.7	(6.3 – 14.6)
Shiawassee	206	14.3	(8.7 - 22.4)
Region 3	739	10.9	(8.6 – 13.8)
Jackson	455	10.9	(8.2 – 14.5)
Lenawee	284	10.9	(7.1 – 16.5)
Region 4	1,747	9.3	(7.9 – 11.0)
Barry-Eaton	553	7.9	(5.8 – 10.5)
Mid-Michigan ^b	576	9.2	(6.6 – 12.7)
Ingham	835	10.3	(8.2 – 12.9)
Region 5	1,500	11.7	(9.8 – 13.8)
Branch-Hillsdale-St. Joseph	431	12.1	(8.9 – 16.3)
Calhoun	391	16.4	(12.1 – 21.8)
Kalamazoo	678	8.6	(6.5 – 11.3)
Region 6	890	9.0	(7.0 – 11.5)
Van Buren-Cass	389	7.3	(4.9 – 10.7)
Berrien	501	10.4	(7.6 – 14.2)
Region 7	2,993	10.3	(9.0 – 11.7)
Allegan	317	8.9	(5.9 – 13.3)
Ionia	190	14.7	(9.3 - 22.4)
Kent	1,521	11.4	(9.5 – 13.6)
Mid-Michigan ^b Ottawa	576 749	9.2	(6.6 – 12.7)
Ollawa	748	7.8	(5.9 - 10.3)

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Table 3 Cont'd			
Geographic Area	Poor Mental Health ^a		
	n	%	95% Confidence Interval
Michigan Total	25,903	11.0	(10.6 – 11.5)
Region 8	1,392	12.7	(10.7 – 14.9)
District #10	904	11.9	(9.6 - 14.7)
Muskegon	488	13.9	(10.7 – 17.9)
Region 9	1,478	9.3	(7.8 – 11.1)
District #2	289	9.3	(6.2 - 13.7)
District #4	329	10.1	(6.9 - 14.6)
Northwest Michigan	426	8.2	(5.8 – 11.3)
Benzie-Leelanau	164	12.6	(7.6 - 20.1)
Grand Traverse	270	8.1	(5.2 – 12.4)
Region 10	1,308	13.3	(11.1 – 15.9)
Bay	324	16.7	(11.5 – 23.5)
Huron	107	8.6	(4.4 - 16.2)
Saginaw	562	13.7	(10.6 – 17.6)
Sanilac	143	13.8	(8.8 - 20.9)
Tuscola	172	7.8	(4.7 – 12.5)
Region 11	909	10.4	(8.2 – 13.1)
Central Michigan	632	11.8	(9.0 - 15.3)
Midland	277	7.5	(4.6 – 12.0)
Region 12	1,131	9.5	(7.6 – 11.9)
Luce-Mackinac-Alger-Schoolcraft	149	9.6	(5.3 – 16.8)
Western Upper Peninsula	242	10.4	(6.6 – 16.0)
Delta-Menominee	254	8.8	(5.3 – 14.1)
Chippewa	111	13.4	(6.9 - 24.5)
Dickinson-Iron	165	6.0	(3.2 – 10.9)
Marquette	210	9.9	(5.9 – 16.2)

^a The proportion who reported 14 or more days, out of the previous 30, on which their mental health was not

good, which includes stress, depression, and problems with emotions.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 4: Activity Limitation on at Least 14 Days in the Past Month Michigan BRFSS, 2003-2006 Combined				
Geographic Area		Activity Limitation ^a		
	n	%	95% Confidence Interval	
Michigan Total	26,037	6.9	(6.6 - 7.3)	
Region 1	10,338	7.2	(6.6 - 7.8)	
Livingston	429	4.9	(3.1 - 7.8)	
Macomb	1,641	6.9	(5.7 - 8.3)	
Monroe	411	8.2	(5.6 – 11.9)	
Oakland	2,813	6.2	(5.2 - 7.4)	
St. Clair	444	7.1	(4.9 – 10.2)	
Washtenaw	862	5.8	(4.2 - 7.9)	
City of Detroit	1,381	10.2	(8.5 – 12.2)	
Wayne exc. Detroit	2,318	6.9	(5.8 - 8.2)	
Region 2	1,536	7.9	(6.5 - 9.5)	
Genesee	1,097	8.2	(6.5 – 10.1)	
Lapeer	232	7.0	(4.3 – 11.4)	
Shiawassee	207	7.5	(4.1 – 13.2)	
Region 3	738	5.4	(4.0 - 7.2)	
Jackson	455	6.3	(4.4 - 8.9)	
Lenawee	283	3.9	(2.3 - 6.6)	
Region 4	1,753	5.5	(4.4 - 6.9)	
Barry-Eaton	556	4.4	(2.9 - 6.4)	
Mid-Michigan ^b	577	5.9	(3.9 - 8.9)	
Ingham	838	6.3	(4.7 - 8.5)	
Region 5	1,512	5.9	(4.8 – 7.2)	
Branch-Hillsdale-St. Joseph	433	6.8	(4.9 - 9.5)	
Calhoun	396	7.9	(5.5 – 11.1)	
Kalamazoo	683	4.2	(3.0 - 5.8)	
Region 6	901	6.7	(5.1 – 8.8)	
Van Buren-Cass	394	4.8	(3.1 – 7.3)	
Berrien	507	8.2	(5.8 – 11.4)	
Region 7	3,008	6.1	(5.1 – 7.2)	
Allegan	320	6.7	(4.4 – 10.3)	
Ionia	193	10.4	(6.0 – 17.2)	
Kent	1,526	6.4	(5.1 – 8.1)	
Mid-Michigan ^b	577	5.9	(3.9 - 8.9)	
Ottawa	751	3.7	(2.5 - 5.6)	

2002 - 2006 Michigan BRFS Regional & Local Health Department Estimates November 19, 2007

Table 4 Cont'd			
Geographic Area	Activity Limitation ^a		
	n	%	95% Confidence Interval
Michigan Total	26,037	6.9	(6.6 - 7.3)
Region 8	1,401	9.1	(7.5 - 10.9)
District #10	907	9.9	(7.8 - 12.4)
Muskegon	494	7.8	(5.7 - 10.6)
Region 9	1,482	7.2	(5.8 - 8.8)
District #2	287	8.7	(5.8 - 12.8)
District #4	331	7.0	(4.6 – 10.5)
Northwest Michigan	426	7.1	(4.7 - 10.8)
Benzie-Leelanau	166	9.5	(5.4 – 16.4)
Grand Traverse	272	4.7	(2.6 - 8.3)
Region 10	1,315	7.7	(6.3 - 9.4)
Bay	327	7.4	(5.0 - 10.8)
Huron	108	8.2	(4.1 – 15.5)
Saginaw	564	7.4	(5.4 - 10.2)
Sanilac	144	12.7	(7.7 - 20.2)
Tuscola	172	4.9	(2.7 - 9.0)
Region 11	915	7.7	(5.9 - 10.0)
Central Michigan	633	8.8	(6.5 – 11.9)
Midland	282	5.4	(3.3 - 8.8)
Region 12	1,138	6.2	(4.8 - 8.0)
Luce-Mackinac-Alger-Schoolcraft	151	7.5	(3.7 - 14.6)
Western Upper Peninsula	239	6.7	(3.6 – 12.1)
Delta-Menominee	256	7.5	(4.7 – 11.7)
Chippewa	115	2.9	(1.3 – 6.5)
Dickinson-Iron	165	6.0	(3.3 - 10.8)
Marquette	212	5.4	(3.0 - 9.6)

^a The proportion who reported 14 or more days, out of the previous 30, on which either poor physical health or poor

mental health kept them from doing their usual activities, such as self-care, work, and recreation.

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Table 5: Life Satisfaction Michigan BRFSS, 2005-2006 Combined				
Geographic Area	Dissa	Dissatisfied or Very Dissatified ^a		
	n	%	95% Confidence Interval	
Michigan Total	17,391	6.1	(5.7 - 6.6)	
Region 1	6,918	7.1	(6.4 - 7.9)	
Livingston	276	3.4	(1.7 - 6.6)	
Macomb	1,136	6.4	(4.8 - 8.5)	
Monroe	265	6.4	(3.8 - 10.7)	
Oakland	1,905	5.5	(4.4 - 7.0)	
St. Clair	290	10.6	(6.9 - 16.0)	
Washtenaw	591	4.2	(2.7 - 6.4)	
City of Detroit	886	12.8	(10.3 – 15.7)	
Wayne exc. Detroit	1,545	6.5	(5.2 - 8.2)	
Region 2	1,053	6.4	(4.8 - 8.5)	
Genesee	747	7.4	(5.4 – 10.1)	
Lapeer	161	3.8	(1.4 - 10.3)	
Shiawassee	145	4.4	(1.7 – 10.8)	
Region 3	504	4.9	(3.2 - 7.4)	
Jackson	308	6.9	(4.3 – 10.8)	
Lenawee	196	1.6	(0.7 - 3.7)	
Region 4	1,148	5.4	(4.1 – 7.1)	
Barry-Eaton	375	5.0	(2.9 - 8.3)	
Mid-Michigan ^b	369	4.6	(2.6 - 7.9)	
Ingham	536	5.7	(3.9 - 8.3)	
Region 5	1,004	5.7	(4.1 – 7.9)	
Branch-Hillsdale-St. Joseph	270	5.7	(2.8 – 11.2)	
Calhoun	275	7.4	(4.2 - 12.8)	
Kalamazoo	459	4.8	(3.0 - 7.5)	
Region 6	606	6.5	(4.3 – 9.7)	
Van Buren-Cass	253	4.8	(2.4 - 9.5)	
Berrien	353	7.6	(4.6 – 12.5)	
Region 7	1,973	4.4	(3.4 - 5.7)	
Allegan	216	3.7	(1.9 – 7.1)	
Ionia	123	5.8	(2.4 – 13.4)	
Kent	999	4.9	(3.4 – 7.1)	
Mid-Michigan ^b	369	4.6	(2.6 – 7.9)	
Ottawa	503	3.5	(2.0 - 5.9)	

2002 - 2006 Michigan BRFS Regional & Local Health Department Estimates November 19, 2007

Table 5 Cont'd			
Geographic Area	Dissatisfied or Very Dissatified ^a		
	n	%	95% Confidence Interval
Michigan Total	17,391	6.1	(5.7 - 6.6)
Region 8	941	6.5	(4.9 - 8.5)
District #10	604	5.5	(3.7 - 8.0)
Muskegon	337	8.0	(5.3 – 11.9)
Region 9	1,001	4.7	(3.5 - 6.4)
District #2	188	7.2	(4.1 – 12.4)
District #4	238	4.5	(2.2 - 9.1)
Northwest Michigan	289	4.0	(2.2 - 7.3)
Benzie-Leelanau	107	6.9	(3.4 - 13.3)
Grand Traverse	179	2.4	(0.8 - 7.0)
Region 10	847	5.7	(4.1 - 8.0)
Bay	193	7.4	(3.6 - 14.5)
Huron	68	1.6	(0.4 - 6.5)
Saginaw	380	6.0	(3.8 - 9.4)
Sanilac	98	1.7	(0.5 - 5.4)
Tuscola	108	7.4	(3.1 – 17.0)
Region 11	628	5.0	(3.3 - 7.5)
Central Michigan	430	5.7	(3.5 - 9.2)
Midland	198	3.6	(1.8 – 7.1)
Region 12	768	4.7	(3.2 - 6.8)
Luce-Mackinac-Alger-Schoolcraft	96	7.0	(2.9 – 15.9)
Western Upper Peninsula	160	3.4	(1.5 – 7.2)
Delta-Menominee	176	2.8	(1.3 - 5.8)
Chippewa	72	9.3	(3.0 - 25.8)
Dickinson-Iron	120	6.0	(2.7 – 13.1)
Marquette	144	3.4	(1.4 - 7.7)

^a The proportion who reported either "Dissatisfied" or "Very Dissatisfied" to the following question: "In general, how satisfied are you with your life?"

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 6: Social and Emotional Support Michigan BRFSS, 2005-2006 Combined			
Geographic Area	Rarely or Never Receive Needed Soc and Emotional Support ^a		
	N	%	95% Confidence Interval
Michigan Total	17,199	7.2	(6.7 - 7.7)
Region 1	6,833	7.2	(6.5 - 8.0)
Livingston	277	3.5	(1.8 – 6.6)
Macomb	1,119	7.4	(5.7 – 9.6)
Monroe	260	5.9	(3.1 – 11.1)
Oakland	1,890	5.5	(4.3 - 7.0)
St. Clair	284	9.6	(6.2 - 14.7)
Washtenaw	583	5.5	(3.5 - 8.5)
City of Detroit	872	11.5	(9.2 - 14.3)
Wayne exc. Detroit	1,524	6.9	(5.5 - 8.6)
Region 2	1,037	7.5	(5.9 - 9.7)
Genesee	740	8.3	(6.2 – 11.1)
Lapeer	159	6.2	(3.1 – 12.1)
Shiawassee	138	4.9	(2.4 - 9.6)
Region 3	498	5.2	(3.3 - 8.0)
Jackson	305	5.8	(3.3 - 9.9)
Lenawee	193	4.2	(2.1 - 8.5)
Region 4	1,145	7.2	(5.5 - 9.3)
Barry-Eaton	374	6.4	(4.2 - 9.6)
Mid-Michigan ^b	367	6.6	(4.2 - 10.2)
Ingham	536	8.0	(5.3 – 11.8)
Region 5	996	6.9	(5.3 - 8.9)
Branch-Hillsdale-St. Joseph	269	8.2	(4.9 - 13.3)
Calhoun	269	6.6	(3.7 - 11.6)
Kalamazoo	458	6.3	(4.5 - 8.9)
Region 6	599	11.6	(8.4 – 15.8)
Van Buren-Cass	250	10.1	(5.9 – 16.8)
Berrien	349	12.6	(8.5 – 18.4)
Region 7	1,966	6.1	(4.8 - 7.6)
Allegan	214	5.2	(2.7 – 10.1)
Ionia	123	4.8	(2.3 - 9.5)
Kent	997	6.2	(4.5 - 8.6)
Mid-Michigan ^b	367	6.6	(4.2 – 10.2)
Ottawa	500	6.3	(4.0 - 9.8)

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Table	e 6 Cont'd		
Geographic Area			eceive the Social and ort that is Needed ^a
	n	%	95% Confidence Interval
Michigan Total	17,199	7.2	(6.7 - 7.7)
Region 8	929	7.4	(5.8 - 9.4)
District #10	599	7.7	(5.8 - 10.2)
Muskegon	330	6.9	(4.4 - 10.8)
Region 9	989	6.4	(4.9 - 8.3)
District #2	186	5.8	(3.2 - 10.2)
District #4	231	6.9	(4.0 - 11.7)
Northwest Michigan	284	5.6	(3.2 - 9.7)
Benzie-Leelanau	108	8.2	(4.2 - 15.3)
Grand Traverse	180	6.6	(3.6 – 11.5)
Region 10	833	9.0	(6.8 - 11.8)
Bay	192	10.4	(5.6 - 18.5)
Huron	64	6.5	(2.6 – 15.2)
Saginaw	374	8.6	(5.7 – 12.9)
Sanilac	96	5.5	(1.8 – 15.7)
Tuscola	107	12.2	(6.8 - 20.8)
Region 11	618	7.1	(5.1 - 9.7)
Central Michigan	421	8.3	(5.7 – 11.8)
Midland	197	4.8	(2.3 - 9.7)
Region 12	756	5.7	(4.0 - 8.1)
Luce-Mackinac-Alger-Schoolcraft	94	8.6	(3.6 - 19.2)
Western Upper Peninsula	161	6.1	(2.5 - 14.2)
Delta-Menominee	171	6.8	(3.7 - 12.1)
Chippewa	70	1.2	(0.3 - 4.8)
Dickinson-Iron	116	4.2	(1.9 - 9.0)
Marquette	144	5.6	(2.6 – 11.8)

^a The proportion who reported either "Rarely" or "Never" to the following question: "How often do you get the social and emotional support you need?"

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 7: Disability Michigan BRFSS, 2003-2006 Combined				
Geographic Area		Disa	bility ^a	
	n	%	95% Confidence Interval	
Michigan Total	26,084	22.1	(21.5 – 22.6)	
Region 1	10,340	21.0	(20.1 – 22.0)	
Livingston	428	20.9	(16.6 - 25.8)	
Macomb	1,640	21.6	(19.5 - 24.0)	
Monroe	408	21.0	(16.8 - 25.9)	
Oakland	2,814	19.8	(18.2 - 21.6)	
St. Clair	447	21.5	(17.4 - 26.2)	
Washtenaw	865	18.1	(15.4 - 21.1)	
City of Detroit	1,376	25.0	(22.5 - 27.7)	
Wayne exc. Detroit	2,328	20.1	(18.3 - 22.0)	
Region 2	1,547	24.3	(21.9 – 26.8)	
Genesee	1,106	23.8	(21.0 - 26.7)	
Lapeer	233	22.7	(17.5 – 29.0)	
Shiawassee	208	28.6	(21.6 – 36.8)	
Region 3	743	18.9	(16.1 – 22.0)	
Jackson	457	20.1	(16.6 – 24.1)	
Lenawee	286	16.9	(12.8 – 22.1)	
Region 4	1,763	21.2	(19.1 – 23.3)	
Barry-Eaton	558	20.5	(17.1 – 24.4)	
Mid-Michigan ^b	581	20.1	(16.6 – 24.0)	
Ingham	844	21.5	(18.6 – 24.8)	
Region 5	1,508	23.9	(21.5 – 26.4)	
Branch-Hillsdale-St. Joseph	431	25.7	(21.3 – 30.6)	
Calhoun	395	26.3	(21.6 – 31.7)	
Kalamazoo	682	21.3	(18.0 – 25.0)	
Region 6	899	21.3	(18.4 – 24.4)	
Van Buren-Cass	393	19.8	(15.8 – 24.6)	
Berrien	506	22.4	(18.6 – 26.7)	
Region 7	3,012	19.7	(18.2 – 21.4)	
Allegan	320	21.0	(16.5 – 26.3)	
Ionia	194	20.5	(15.0 - 27.4)	
Kent	1,527	19.7	(17.5 - 22.0)	
Mid-Michigan ^b	581	20.1	(16.6 - 24.0)	
Ottawa	751	19.6	(16.7 – 22.9)	

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Table 7 Cont'd				
Geographic Area		Disa	ability ^a	
	n	%	95% Confidence Interval	
Michigan Total	26,084	22.1	(21.5 – 22.6)	
Region 8	1,410	25.9	(23.3 – 28.6)	
District #10	915	26.9	(23.7 - 30.4)	
Muskegon	495	24.2	(20.3 - 28.6)	
Region 9	1,489	26.0	(23.5 – 28.6)	
District #2	292	30.5	(24.6 - 37.2)	
District #4	332	26.9	(21.8 - 32.6)	
Northwest Michigan	426	25.7	(21.3 - 30.6)	
Benzie-Leelanau	166	26.4	(19.2 - 35.2)	
Grand Traverse	273	20.5	(15.9 - 26.0)	
Region 10	1,315	22.4	(20.0 – 25.1)	
Bay	326	19.2	(15.0 - 24.2)	
Huron	109	25.1	(16.6 – 35.9)	
Saginaw	564	22.0	(18.5 – 26.0)	
Sanilac	143	34.9	(25.8 – 45.2)	
Tuscola	173	19.5	(14.2 – 26.2)	
Region 11	918	25.3	(22.3 - 28.7)	
Central Michigan	634	27.3	(23.5 - 31.4)	
Midland	284	21.3	(16.6 - 27.0)	
Region 12	1,140	24.9	(22.1 – 27.8)	
Luce-Mackinac-Alger-Schoolcraft	150	25.3	(18.0 - 34.3)	
Western Upper Peninsula	240	24.7	(18.9 – 31.7)	
Delta-Menominee	254	22.6	(17.5 – 28.7)	
Chippewa	114	25.4	(16.6 - 36.8)	
Dickinson-Iron	168	34.0	(26.4 - 42.4)	
Marquette	214	20.3	(15.3 - 26.5)	

^a The proportion who reported being limited in any activities because of physical, mental, or emotional problems, or reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 8: Weight Status Michigan BRFSS, 2002-2006 Combined							
Geographic Area	Sample Size	(Obese ^a	Ove	erweight ^b		Overweight Obese ^c
	n	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	30,770	26.4	(25.8 – 27.0)	36.4	(35.7 - 37.0)	37.3	(36.6 - 37.9)
Region 1	11,687	26.1	(25.1 - 27.1)	35.4	(34.4 - 36.5)	38.5	(37.4 - 39.6)
Livingston	473	22.9	(18.9 - 27.5)	37.5	(32.7 - 42.6)	39.6	(34.6 - 44.9)
Macomb	1,835	23.8	(21.5 - 26.2)	38.5	(35.9 - 41.2)	37.7	(35.1 - 40.4)
Monroe	462	25.6	(21.3 - 30.4)	37.6	(32.5 - 43.1)	36.8	(31.5 - 42.4)
Oakland	3,160	21.2	(19.5 - 22.9)	37.0	(35.0 - 39.1)	41.8	(39.8 - 43.9)
St. Clair	498	29.6	(25.1 - 34.5)	36.0	(31.1 - 41.1)	34.5	(29.5 - 39.8)
Washtenaw	983	21.1	(18.2 - 24.3)	36.2	(32.7 - 39.8)	42.7	(39.1 - 46.5)
City of Detroit	1,609	37.5	(34.6 - 40.4)	31.3	(28.7 - 34.0)	31.3	(28.6 - 34.1)
Wayne exc. Detroit	2,627	26.1	(24.1 - 28.1)	33.8	(31.7 - 36.0)	40.1	(37.9 - 42.4)
Region 2	1,749	26.3	(24.0 - 28.8)	37.5	(34.8 - 40.3)	36.1	(33.4 - 38.9)
Genesee	1,248	26.9	(24.2 - 29.9)	37.1	(34.0 - 40.4)	35.9	(32.7 - 39.2)
Lapeer	259	25.8	(20.2 - 32.2)	39.1	(32.5 - 46.1)	35.2	(28.6 - 42.3)
Shiawassee	242	23.8	(18.1 - 30.6)	37.8	(30.7 - 45.5)	38.4	(31.2 - 46.2)
Region 3	835	25.9	(22.6 - 29.5)	38.4	(34.6 - 42.3)	35.7	(31.9 - 39.6)
Jackson	508	25.9	(21.7 - 30.6)	38.4	(33.6 - 43.4)	35.7	(30.9 - 40.8)
Lenawee	327	25.9	(20.9 - 31.7)	38.5	(32.5 - 44.9)	35.6	(29.6 - 42.0)
Region 4	1,973	26.9	(24.7 - 29.3)	35.3	(32.8 - 37.9)	37.7	(35.2 - 40.3)
Barry-Eaton	618	26.7	(22.8 - 31.0)	36.6	(32.1 - 41.3)	36.7	(32.3 - 41.4)
Mid-Michigan ^d	665	30.8	(26.8 - 35.1)	32.4	(28.4 - 36.6)	36.9	(32.7 - 41.3)
Ingham	944	26.6	(23.3 - 30.1)	35.9	(32.3 - 39.7)	37.5	(33.8 - 41.3)
Region 5	1,740	26.5	(24.1 - 29.0)	36.7	(34.1 - 39.5)	36.7	(34.0 - 39.5)
Branch-Hillsdale-St. Joseph	504	31.6	(27.0 - 36.6)	33.4	(28.8 - 38.4)	35.0	(30.1 - 40.2)
Calhoun	466	28.0	(23.5 - 32.9)	40.9	(35.5 - 46.5)	31.2	(26.4 - 36.4)
Kalamazoo	770	22.3	(19.0 - 26.0)	36.4	(32.4 - 40.6)	41.3	(37.1 - 45.6)
Region 6	1,032	24.9	(22.0 - 28.1)	39.4	(35.8 - 43.1)	35.7	(32.2 - 39.4)
Van Buren-Cass	446	24.6	(20.2 - 29.7)	35.6	(30.4 - 41.1)	39.8	(34.3 - 45.6)
Berrien	586	25.1	(21.3 - 29.4)	42.2	(37.4 - 47.2)	32.7	(28.2 - 37.6)
Region 7	4,266	23.8	(22.2 - 25.4)	36.8	(35.0 - 38.7)	39.4	(37.5 - 41.3)
Allegan	377	24.5	(19.9 - 29.7)	35.2	(29.7 - 41.2)	40.3	(34.6 - 46.2)
Ionia	225	25.8	(19.9 - 32.7)	37.5	(30.4 - 45.1)	36.8	(29.6 - 44.6)
Kent	2,568	22.7	(20.6 - 24.9)	35.5	(33.0 - 38.0)	41.8	(39.3 - 44.4)
Mid-Michigan ^d	665	30.8	(26.8 - 35.1)	32.4	(28.4 - 36.6)	36.9	(32.7 - 41.3)

842

21.8

(18.9 - 25.1)

41.4

(37.5 - 45.4)

Ottawa

(33.0 - 40.7)

36.7

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Table 8 Cont'd							
Geographic Area	Sample Size	c)bese ^a	Ove	erweight ^b	Not Overweight or Obese ^c	
	n	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	30,770	26.4	(25.8 – 27.0)	36.4	(35.7 – 37.0)	37.3	(36.6 – 37.9)
Region 8	1,585	27.3	(24.9 – 29.9)	36.4	(33.6 - 39.3)	36.3	(33.5 - 39.2)
District #10	1,030	26.7	(23.7 - 29.8)	37.1	(33.7 - 40.5)	36.3	(32.9 - 39.9)
Muskegon	555	28.3	(24.1 – 33.0)	35.4	(30.7 - 40.4)	36.3	(31.5 - 41.3)
Region 9	1,681	27.4	(24.9 – 29.9)	39.6	(36.8 – 42.4)	33.0	(30.5 - 35.7)
District #2	334	33.2	(27.5 - 39.4)	37.1	(31.1 - 43.5)	29.7	(24.2 - 36.0)
District #4	376	24.7	(20.1 – 30.0)	39.1	(33.5 - 45.0)	36.2	(30.7 – 42.1)
Northwest Michigan	470	26.0	(21.6 – 30.9)	42.7	(37.5 - 48.1)	31.3	(26.7 - 36.3)
Benzie-Leelanau	189	28.5	(21.7 – 36.5)	37.0	(29.5 - 45.3)	34.4	(26.9 - 42.8)
Grand Traverse	312	26.0	(20.5 – 32.3)	39.5	(33.3 - 46.0)	34.6	(29.0 - 40.6)
Region 10	1,496	31.8	(29.0 - 34.6)	35.7	(32.8 - 38.6)	32.6	(29.7 – 35.5)
Bay	367	26.7	(21.9 – 32.3)	37.6	(31.7 - 43.9)	35.7	(29.7 – 42.1)
Huron	128	28.5	(20.5 – 38.1)	38.4	(29.1 – 48.8)	33.1	(23.7 - 44.0)
Saginaw	640	33.8	(29.6 – 38.3)	35.3	(31.1 – 39.8)	30.8	(26.7 - 35.3)
Sanilac	163	34.0	(25.8 – 43.3)	31.8	(24.1 – 40.6)	34.2	(25.9 – 43.5)
Tuscola	198	34.4	(26.8 – 42.9)	34.4	(27.0 - 42.6)	31.2	(24.1 – 39.3)
Region 11	1,432	27.8	(24.9 – 30.9)	36.5	(33.2 - 39.9)	35.7	(32.4 - 39.2)
Central Michigan	722	29.8	(26.1 – 33.7)	37.4	(33.2 - 41.7)	32.9	(28.8 - 37.3)
Midland	710	23.7	(19.3 – 28.7)	34.7	(29.4 - 40.3)	41.6	(36.0 – 47.5)
Region 12	1,294	26.8	(24.1 – 29.7)	37.2	(34.2 - 40.4)	36.0	(32.9 - 39.2)
Luce-Mackinac-Alger-Schoolcraft	169	33.5	(25.2 – 42.9)	33.1	(25.6 – 41.7)	33.4	(25.5 – 42.3)
Western Upper Peninsula	265	28.2	(22.5 – 34.7)	33.0	(26.9 - 39.8)	38.8	(31.8 – 46.2)
Delta-Menominee	289	26.9	(21.4 – 33.3)	38.8	(32.4 – 45.5)	34.3	(28.1 – 41.1)
Chippewa	135	28.0	(20.1 – 37.7)	37.3	(28.0 - 47.6)	34.7	(26.0 – 44.6)
Dickinson-Iron	190	23.4	(17.4 – 30.7)	39.9	(31.9 – 48.6)	36.7	(28.8 – 45.3)
Marquette	246	22.3	(17.2 – 28.5)	40.7	(33.9 - 47.9)	37.0	(29.9 – 44.6)

Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)²]. Weight and height were self-reported. Pregnant women were excluded.

^a The proportion of respondents whose BMI was greater than or equal to 30.0.

^b The proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.

^c The proportion of respondents whose BMI was less than 25.0.

d The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 9: No Health Care Coverage Among Those Aged 18-64 Years Michigan BRFSS, 2002-2006 Combined				
Geographic Area	No	Health C	are Coverage ^a	
	n	%	95% Confidence Interval	
Michigan Total	24,245	14.1	(13.6 – 14.7)	
Region 1	9,356	12.7	(11.8 – 13.6)	
Livingston	396	9.0	(5.9 – 13.6)	
Macomb	1,431	14.3	(12.1 – 16.8)	
Monroe	372	8.9	(5.9 – 13.3)	
Oakland	2,518	8.7	(7.4 – 10.3)	
St. Clair	420	17.3	(13.0 – 22.5)	
Washtenaw	833	7.3	(5.4 – 9.9)	
City of Detroit	1,294	21.6	(18.9 – 24.5)	
Wayne exc. Detroit	2,065	11.7	(10.0 – 13.6)	
Region 2	1,408	12.8	(10.7 – 15.2)	
Genesee	1,003	13.9	(11.3 – 16.9)	
Lapeer	223	10.7	(6.5 – 17.2)	
Shiawassee	182	9.2	(5.1 – 16.3)	
Region 3	630	17.3	(13.7 – 21.6)	
Jackson	395	17.3	(12.9 – 22.7)	
Lenawee	235	17.4	(11.8 – 24.8)	
Region 4	1,580	12.9	(10.9 – 15.3)	
Barry-Eaton	468	14.0	(10.3 – 18.7)	
Mid-Michigan ^b	529	9.6	(7.1 – 13.0)	
Ingham	782	13.3	(10.4 – 16.9)	
Region 5	1,316	16.0	(13.6 – 18.7)	
Branch-Hillsdale-St. Joseph	389	17.7	(13.3 – 23.1)	
Calhoun	341	22.6	(17.2 – 29.0)	
Kalamazoo	586	11.0	(8.2 – 14.5)	
Region 6	802	18.2	(14.9 – 22.1)	
Van Buren-Cass	335	17.5	(12.6 – 23.7)	
Berrien	467	18.7	(14.4 – 23.9)	
Region 7	3,468	12.6	(11.1 – 14.2)	
Allegan	289	19.5	(14.1 – 26.3)	
Ionia	178	11.7	(6.8 – 19.6)	
Kent	2,120	11.9	(10.0 – 14.1)	
Mid-Michigan ^b Ottawa	529 682	9.6 12.6	(7.1 – 13.0) (9.7 – 16.1)	

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Table 9 Cont'd				
Geographic Area	No	Health C	are Coverage ^a	
	n	%	95% Confidence Interval	
Michigan Total	24,245	14.1	(13.6 – 14.7)	
Region 8	1,218	17.6	(15.0 – 20.5)	
District #10	790	16.9	(13.8 – 20.5)	
Muskegon	428	18.7	(14.3 - 23.9)	
Region 9	1,205	19.1	(16.4 – 22.0)	
District #2	228	21.4	(15.9 - 28.3)	
District #4	263	19.9	(14.4 - 26.8)	
Northwest Michigan	347	20.4	(15.4 - 26.5)	
Benzie-Leelanau	126	13.7	(7.3 - 24.1)	
Grand Traverse	241	17.1	(12.1 – 23.6)	
Region 10	1,166	14.6	(12.1 – 17.6)	
Bay	289	17.7	(12.0 – 25.3)	
Huron	94	21.7	(12.7 - 34.6)	
Saginaw	505	13.7	(10.3 – 18.0)	
Sanilac	124	13.8	(8.3 - 22.1)	
Tuscola	154	8.4	(4.5 – 15.2)	
Region 11	1,134	16.0	(13.1 – 19.4)	
Central Michigan	535	19.1	(15.2 - 23.8)	
Midland	599	10.3	(7.0 - 14.9)	
Region 12	962	17.9	(15.0 – 21.2)	
Luce-Mackinac-Alger-Schoolcraft	140	19.1	(12.2 - 28.7)	
Western Upper Peninsula	207	20.7	(14.5 – 28.7)	
Delta-Menominee	218	15.2	(10.0 - 22.3)	
Chippewa	100	20.3	(12.1 – 32.1)	
Dickinson-Iron	122	12.8	(6.6 - 23.4)	
Marquette	175	18.9	(12.3 – 27.7)	

^a Among those aged 18-64 years, the proportion who reported having no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare.

b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 10: Health Care Access Michigan BRFSS, 2002-2006 (for No Personal Health Care Provider), 2003-2006 (for No Heath Care Access During Past 12 Months Due to Cost) Combined No Health Care Access During No Personal Health Geographic Area Care Provider^a Past 12 Months Due to Cost^b 95% Confidence 95% Confidence n % n % Interval Interval 32,141 (14.7 - 15.8)26,245 (11.7 - 12.7)Michigan Total 15.2 12.2 Region 1 12,231 16.2 (15.4 - 17.1)10,419 12.0 (11.2 - 12.8)Livingston 495 14.6 (11.0 - 19.2)431 8.6 (5.6 - 13.0)Macomb 1,938 15.2 (13.2 - 17.5)1,652 11.1 (9.3 - 13.2)Monroe 477 14.4 (10.7 - 19.1)414 10.2 (7.1 - 14.5)Oakland 3,307 13.8 (12.3 - 15.4)2,831 9.0 (7.8 - 10.4)St. Clair 519 17.6 (13.6 - 22.6)449 14.6 (11.0 - 19.1)Washtenaw 1,019 16.5 (13.8 - 19.6)870 8.8 (6.6 - 11.6)City of Detroit 1,686 22.6 (20.1 - 25.2)1,388 19.9 (17.4 - 22.7)Wayne exc. Detroit 2,744 14.9 (13.3 - 16.8)2,345 11.5 (10.0 - 13.3)Region 2 1,840 12.8 (10.9 - 14.9)1,554 13.5 (11.5 - 15.7)Genesee 1,318 13.8 (11.4 - 16.5)1,109 14.0 (11.6 - 16.7)Lapeer 14.1 273 11.9 (8.0 - 17.3)235 (9.7 - 20.1)Shiawassee 249 8.0 (4.8 - 13.2)210 10.2 (6.1 - 16.6)Region 3 876 12.6 749 11.9 (9.3 - 15.2)(9.9 - 15.9)**Jackson** 539 14.1 (10.5 - 18.7)461 13.5 (9.9 - 18.0)Lenawee 337 10.2 (6.8 - 15.2)288 9.5 (6.1 - 14.5)Region 4 2,057 15.5 (13.5 - 17.8)1,769 11.0 (9.3 - 13.0)Barry-Eaton 644 11.4 (8.4 - 15.2)559 12.3 (9.2 - 16.2)Mid-Michigan^c 686 11.4 (8.9 - 14.6)585 10.9 (8.1 - 14.5)Ingham 985 20.6 (17.3 - 24.4)846 10.4 (8.0 - 13.4)Region 5 1,812 17.9 (15.6 - 20.4)1,521 14.8 (12.6 - 17.3)Branch-Hillsdale-St. Joseph 526 17.9 (13.9 - 22.8)436 15.2 (11.5 - 19.9)Calhoun 484 16.0 (12.0 - 21.0)398 19.9 (15.1 - 25.9)

802

1,063

459

604

19.0

19.1

17.2

20.5

(15.6 - 22.9)

(16.2 - 22.4)

(13.2 - 22.1)

(16.6 - 25.0)

687

905

395

510

11.6

15.9

15.2

16.4

Kalamazoo

Berrien

Van Buren-Cass

Region 6

23

(8.9 - 15.0)

(13.0 - 19.3)

(11.1 - 20.5)

(12.6 - 21.0)

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	Table 10 Cont'd					
Geographic Area			nal Health rovider ^a	No Health Care Access During Past 12 Months Due to Cost ^b		
	n	%	95% Confidence Interval	n	%	95% Confidence Interval
Michigan Total	32,141	15.2	(14.7 – 15.8)	26,245	12.2	(11.7 – 12.7)
Region 7	4,448	12.1	(10.8 – 13.6)	3,024	9.9	(8.6 – 11.3)
Allegan	387	11.7	(8.2 - 16.4)	321	11.0	(7.4 - 16.1)
Ionia	237	13.6	(8.6 - 20.8)	194	11.2	(6.7 – 18.0)
Kent	2,691	12.4	(10.6 – 14.4)	1,535	10.0	(8.2 – 12.0)
Mid-Michigan ^c	686	11.4	(8.9 – 14.6)	585	10.9	(8.1 – 14.5)
Ottawa	875	10.6	(8.1 – 14.0)	753	8.5	(6.3 – 11.4)
Region 8	1,651	12.2	(10.3 – 14.5)	1,416	13.9	(11.8 – 16.4)
District #10	1,066	11.8	(9.6 – 14.5)	916	13.9	(11.3 – 17.0)
Muskegon	585	12.9	(9.6 - 17.1)	500	14.0	(10.6 – 18.2)
Region 9	1,747	15.2	(13.1 – 17.5)	1,496	13.0	(11.0 – 15.3)
District #2	343	10.6	(7.5 - 15.0)	294	17.1	(12.2 - 23.6)
District #4	394	13.7	(10.1 – 18.5)	333	9.8	(6.4 - 14.7)
Northwest Michigan	496	18.0	(13.8 – 23.1)	430	14.9	(11.3 – 19.6)
Benzie-Leelanau	193	10.1	(5.7 – 17.3)	167	13.2	(7.7 - 21.6)
Grand Traverse	321	20.1	(15.2 – 26.2)	272	9.3	(6.0 - 14.2)
Region 10	1,559	12.8	(10.7 – 15.3)	1,322	11.9	(9.9 - 14.2)
Bay	383	17.7	(12.7 – 24.2)	328	11.6	(7.7 - 17.0)
Huron	132	12.0	(6.2 - 22.2)	108	14.4	(8.2 - 24.0)
Saginaw	670	11.2	(8.4 - 14.8)	569	11.0	(8.3 - 14.5)
Sanilac	172	10.9	(6.5 – 17.6)	144	14.9	(9.3 - 23.0)
Tuscola	202	11.2	(6.9 - 17.8)	173	12.0	(7.3 - 19.1)
Region 11	1,507	19.3	(16.4 – 22.5)	922	12.8	(10.3 – 15.7)
Central Michigan	754	21.2	(17.5 – 25.4)	638	12.6	(9.8 - 16.1)
Midland	753	15.5	(11.5 – 20.5)	284	13.1	(8.8 - 19.1)
Region 12	1,350	15.7	(13.3 – 18.4)	1,148	10.9	(8.9 - 13.3)
Luce-Mackinac-Alger-Schoolcraft	177	16.7	(10.6 – 25.4)	150	12.7	(7.7 - 20.2)
Western Upper Peninsula	280	18.0	(12.7 – 24.9)	243	14.9	(10.1 – 21.3)
Delta-Menominee	298	16.4	(11.9 – 22.1)	257	10.2	(6.3 - 16.0)
Chippewa	138	17.1	(10.3 – 27.1)	116	8.9	(4.3 – 17.5)
Dickinson-Iron	200	11.3	(6.6 - 18.7)	168	7.5	(4.2 - 13.0)
Marquette	257	14.1	(9.6 - 20.3)	214	9.6	(6.1 – 14.8)

^a The proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider.

b The proportion who reported that in the past 12 months there was a time when they needed to see a doctor but could not due to the cost.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 11: No Leisure-Time Physical Activity Michigan BRFSS, 2002-2006 Combined				
Geographic Area	No Leis	sure-Time	Physical Activity ^a	
	n	%	95% Confidence Interval	
Michigan Total	32,182	22.8	(22.2 – 23.3)	
Region 1	12,247	23.1	(22.2 - 24.0)	
Livingston	496	16.8	(13.4 - 20.8)	
Macomb	1,938	23.7	(21.5 - 26.0)	
Monroe	478	21.1	(17.2 - 25.5)	
Oakland	3,309	18.3	(16.8 - 19.9)	
St. Clair	518	21.8	(18.0 - 26.3)	
Washtenaw	1,024	17.0	(14.4 – 19.9)	
City of Detroit	1,693	33.4	(30.8 - 36.2)	
Wayne exc. Detroit	2,744	24.0	(22.1 – 25.9)	
Region 2	1839	23.8	(21.7 – 26.1)	
Genesee	1317	24.6	(22.0 - 27.4)	
Lapeer	273	21.5	(16.5 - 27.5)	
Shiawassee	249	22.1	(16.7 – 28.7)	
Region 3	877	22.5	(19.6 – 25.7)	
Jackson	540	20.6	(17.1 – 24.6)	
Lenawee	337	25.4	(20.6 – 31.0)	
Region 4	2,059	20.0	(18.0 – 22.1)	
Barry-Eaton	643	18.3	(15.0 – 22.1)	
Mid-Michigan ^b	686	23.1	(19.8 - 26.9)	
Ingham	987	20.9	(18.0 – 24.2)	
Region 5	1,816	22.1	(19.9 - 24.4)	
Branch-Hillsdale-St. Joseph	529	28.6	(24.3 - 33.3)	
Calhoun	484	21.1	(17.3 – 25.6)	
Kalamazoo	803	18.5	(15.5 – 22.0)	
Region 6	1,065	25.5	(22.4 – 28.7)	
Van Buren-Cass	461	27.3	(22.7 - 32.6)	
Berrien	604	24.1	(20.2 - 28.4)	
Region 7	4,454	19.5	(18.1 – 21.0)	
Allegan	389	22.3	(18.0 – 27.3)	
Ionia	238	21.5	(15.9 – 28.5)	
Kent	2,694	18.7	(16.9 – 20.7)	
Mid-Michigan ^b	686	23.1	(19.8 – 26.9)	
Ottawa	876	17.0	(14.5 – 19.9)	

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Table 11 Cont'd				
Geographic Area	No Leis	sure-Time	Physical Activity ^a	
	n	%	95% Confidence Interval	
Michigan Total	32,182	22.8	(22.2 – 23.3)	
Region 8	1,652	25.0	(22.6 – 27.6)	
District #10	1,067	23.3	(20.5 - 26.4)	
Muskegon	585	27.7	(23.4 - 32.3)	
Region 9	1,749	22.6	(20.4 - 25.0)	
District #2	344	29.7	(24.4 - 35.7)	
District #4	394	25.2	(20.6 - 30.5)	
Northwest Michigan	497	23.5	(19.5 – 28.2)	
Benzie-Leelanau	193	20.5	(14.8 – 27.7)	
Grand Traverse	321	12.2	(8.8 - 16.6)	
Region 10	1,560	24.9	(22.4 – 27.5)	
Bay	383	21.9	(17.2 – 27.6)	
Huron	132	20.7	(13.9 - 29.7)	
Saginaw	671	26.7	(23.0 - 30.8)	
Sanilac	172	24.2	(17.4 – 32.6)	
Tuscola	202	27.4	(20.6 - 35.5)	
Region 11	1,511	25.2	(22.4 - 28.2)	
Central Michigan	757	28.1	(24.4 - 32.0)	
Midland	754	19.4	(15.4 – 24.1)	
Region 12	1,353	23.5	(21.0 – 26.2)	
Luce-Mackinac-Alger-Schoolcraft	177	23.7	(17.3 – 31.5)	
Western Upper Peninsula	281	23.2	(18.1 – 29.4)	
Delta-Menominee	300	23.3	(18.2 – 29.3)	
Chippewa	137	24.0	(16.8 – 33.1)	
Dickinson-Iron	200	27.4	(20.7 - 35.3)	
Marquette	258	20.5	(15.5 - 26.5)	

^a The proportion who reported not participating in any leisure-time physical activities or exercises such as running, calisthenics, golf, gardening, or walking during the past month.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 12: Inadequate Physical Activity Michigan BRFSS, 2002, 2003, 2005 Combined				
Geographic Area	Inad	equate Pł	nysical Activity ^a	
	n	%	95% Confidence Interval	
Michigan Total	20,480	51.4	(50.6 – 52.3)	
Region 1	7,649	52.2	(50.8 – 53.5)	
Livingston	303	45.6	(39.4 – 51.9)	
Macomb	1,218	53.0	(49.7 - 56.3)	
Monroe	274	51.7	(44.7 – 58.7)	
Oakland	2,117	50.7	(48.1 – 53.3)	
St. Clair	308	42.1	(35.8 – 48.7)	
Washtenaw	664	49.2	(44.7 – 53.8)	
City of Detroit	1,043	57.6	(53.9 – 61.3)	
Wayne exc. Detroit	1,694	53.2	(50.4 – 56.1)	
Region 2	1,159	52.8	(49.3 – 56.2)	
Genesee	826	55.8	(51.7 – 59.8)	
Lapeer	177	48.3	(40.0 – 56.8)	
Shiawassee	156	41.7	(32.9 – 51.0)	
Region 3	550	51.3	(46.5 – 56.1)	
Jackson	337	50.1	(44.0 – 56.2)	
Lenawee	213	53.1	(45.2 – 61.0)	
Region 4	1,275	50.5	(47.2 – 53.7)	
Barry-Eaton	398	45.9	(40.2 – 51.7)	
Mid-Michigan ^b	447	53.1	(47.6 – 58.4)	
Ingham	599	54.3	(49.5 – 59.1)	
Region 5	1,137	52.0	(48.5 – 55.5)	
Branch-Hillsdale-St. Joseph	334	52.0	(45.6 – 58.3)	
Calhoun	312	49.4	(42.8 – 56.0)	
Kalamazoo	491	53.7	(48.3 – 59.0)	
Region 6	637	51.8	(47.1 – 56.5)	
Van Buren-Cass	264	57.7	(50.4 – 64.7)	
Berrien	373	47.7	(41.6 – 53.9)	
Region 7	3095	51.6	(49.4 – 53.9)	
Allegan	239	48.7	(41.5 – 56.0)	
Ionia	149	54.3	(45.1 – 63.3)	
Kent	1969	49.9	(46.9 – 53.0)	
Mid-Michigan ^b	447	53.1	(47.6 – 58.4)	
Ottawa	569	53.2	(48.4 – 58.0)	

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Table 12 Cont'd						
Geographic Area	Inad	Inadequate Physical Activity ^a				
	n	%	95% Confidence Interval			
Michigan Total	20,480	51.4	(50.6 – 52.3)			
Region 8	993	48.6	(45.0 – 52.3)			
District #10	637	44.7	(40.3 - 49.2)			
Muskegon	356	54.9	(48.5 - 61.1)			
Region 9	1,084	49.0	(45.5 – 52.5)			
District #2	212	51.2	(43.1 - 59.1)			
District #4	251	45.7	(38.6 - 52.9)			
Northwest Michigan	310	51.9	(45.3 - 58.4)			
Benzie-Leelanau	118	44.7	(34.6 - 55.2)			
Grand Traverse	193	48.6	(40.6 - 56.8)			
Region 10	978	52.0	(48.2 – 55.7)			
Bay	229	51.6	(43.7 - 59.4)			
Huron	79	47.6	(34.9 - 60.6)			
Saginaw	431	53.4	(47.8 - 58.9)			
Sanilac	114	53.5	(42.3 - 64.4)			
Tuscola	125	49.2	(38.8 - 59.7)			
Region 11	1,086	50.5	(46.2 - 54.7)			
Central Michigan	464	50.0	(44.5 – 55.5)			
Midland	622	51.3	(44.6 - 57.9)			
Region 12	837	48.1	(44.2 – 52.1)			
Luce-Mackinac-Alger-Schoolcraft	102	42.0	(31.6 – 53.2)			
Western Upper Peninsula	176	44.8	(36.6 - 53.3)			
Delta-Menominee	184	55.1	(46.6 - 63.2)			
Chippewa	90	44.2	(32.5 - 56.5)			
Dickinson-Iron	126	56.0	(45.6 - 66.0)			
Marquette	159	43.6	(34.9 - 52.7)			

^a The proportion who reported that they do not usually do moderate physical activities for a total of at least 30 minutes on five or more days per week or vigorous physical activities for a total of at least 20 minutes on three or more days per week while not at work.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 13: Inadequate Fruit and Vegetable Consumption Michigan BRFSS, 2002, 2003, and 2005 Combined						
Geographic Area	Inade	Inadequate Fruit and Vegetab Consumption ^a				
	n	%	95% Confidence Interval			
Michigan Total	21,196	77.7	(77.0 – 78.3)			
Region 1	7,889	77.2	(76.1 – 78.3)			
Livingston	314	74.5	(68.7 – 79.5)			
Macomb	1,249	79.8	(77.1 – 82.2)			
Monroe	286	79.3	(72.9 – 84.6)			
Oakland	2,186	75.3	(73.2 - 77.4)			
St. Clair	324	79.9	(74.3 – 84.6)			
Washtenaw	679	73.2	(69.3 – 76.8)			
City of Detroit	1073	78.4	(75.3 – 81.2)			
Wayne exc. Detroit	1,749	78.0	(75.7 – 80.1)			
Region 2	1,209	79.2	(76.5 – 81.8)			
Genesee	862	79.8	(76.5 – 82.8)			
Lapeer	183	77.3	(69.7 – 83.5)			
Shiawassee	164	78.5	(70.7 – 84.6)			
Region 3	573	75.9	(71.6 – 79.8)			
Jackson	353	75.2	(69.6 – 80.1)			
Lenawee	220	77.1	(69.8 – 83.0)			
Region 4	1,325	77.7	(74.9 – 80.2)			
Barry-Eaton	426	77.9	(73.0 – 82.1)			
Mid-Michigan ^b	458	83.7	(79.8 – 87.0)			
Ingham	615	75.3	(70.9 – 79.2)			
Region 5	1,178	78.3	(75.3 – 81.0)			
Branch-Hillsdale-St. Joseph	346	82.4	(77.4 – 86.5)			
Calhoun	328	76.8	(71.0 – 81.8)			
Kalamazoo	504	76.5	(71.6 – 80.7)			
Region 6	673	79.1	(75.2 – 82.4)			
Van Buren-Cass	285	83.1	(77.7 – 87.4)			
Berrien	388	76.1	(70.6 – 80.9)			

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Table 13 Cont'd							
Geographic Area	Inadequate Fruit and Vegetable Consumption ^a						
	n	%	95% Confidence Interval				
Michigan Total	21,196	77.7	(77.0 – 78.3)				
Region 7	3,170	78.8	(76.9 - 80.5)				
Allegan	248	77.3	(70.9 - 82.6)				
Ionia	155	79.3	(71.0 - 85.7)				
Kent	2,010	77.9	(75.4 - 80.3)				
Mid-Michigan ^b	458	83.7	(79.8 – 87.0)				
Ottawa	583	78.9	(74.9 - 82.4)				
Region 8	1,041	78.3	(75.2 – 81.1)				
District #10	663	77.4	(73.5 – 81.0)				
Muskegon	378	79.6	(74.4 - 84.0)				
Region 9	1,153	76.9	(74.0 – 79.5)				
District #2	225	81.3	(74.8 - 86.5)				
District #4	269	79.3	(73.2 - 84.3)				
Northwest Michigan	333	75.1	(69.7 – 79.8)				
Benzie-Leelanau	125	67.6	(57.1 – 76.6)				
Grand Traverse	201	77.6	(70.6 - 83.3)				
Region 10	1,019	78.8	(75.7 – 81.5)				
Bay	238	80.3	(74.4 – 85.1)				
Huron	85	71.9	(60.0 - 81.4)				
Saginaw	450	79.9	(75.2 - 83.9)				
Sanilac	119	80.0	(69.4 - 87.6)				
Tuscola	127	75.9	(66.0 - 83.6)				
Region 11	1,103	77.4	(73.8 - 80.7)				
Central Michigan	477	78.9	(74.3 - 82.8)				
Midland	626	74.7	(68.4 – 80.1)				
Region 12	863	74.5	(70.9 – 77.9)				
Luce-Mackinac-Alger-Schoolcraft	106	78.9	(68.9 – 86.3)				
Western Upper Peninsula	179	71.5	(62.8 – 78.8)				
Delta-Menominee	188	77.5	(69.3 – 84.0)				
Chippewa	89	83.9	(71.7 – 91.5)				
Dickinson-Iron	133	68.2	(57.8 – 77.0)				
Marquette	168	70.9	(62.4 – 78.2)				

^a The proportion whose total reported consumption of fruits (including juice) and vegetables was less than five times per

day.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 14:	Cigarette Smoking
Michigan BRF	SS, 2002-2006 Combined

Michigan BRFSS, 2002-2006 Combined								
Geographic Area	Sample Size	Curre	nt Smoking ^a	Form	er Smoking ^b	Neve	er Smoked	
	n	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	
Michigan Total	32,111	23.0	(22.4 – 23.6)	26.0	(25.5 – 26.6)	50.9	(50.3 – 51.6)	
Region 1	12,216	22.2	(21.3 – 23.1)	25.7	(24.8 – 26.6)	52.1	(51.1 – 53.2)	
Livingston	495	17.9	(14.2 - 22.4)	29.7	(25.4 - 34.3)	52.4	(47.3 - 57.4)	
Macomb	1,933	23.6	(21.3 - 26.0)	27.8	(25.6 - 30.1)	48.6	(46.0 - 51.3)	
Monroe	478	26.1	(21.3 - 31.4)	26.3	(22.1 – 31.0)	47.7	(42.3 - 53.1)	
Oakland	3,303	18.6	(16.9 - 20.3)	27.1	(25.5 - 28.9)	54.3	(52.3 - 56.3)	
St. Clair	519	31.4	(26.7 - 36.5)	25.1	(21.1 – 29.6)	43.5	(38.5 - 48.7)	
Washtenaw	1,022	12.4	(10.2 – 15.1)	24.0	(21.2 – 27.0)	63.6	(60.1 - 67.0)	
City of Detroit	1,685	27.7	(25.1 – 30.4)	19.4	(17.4 – 21.6)	52.9	(50.0 - 55.8)	
Wayne exc. Detroit	2,735	23.1	(21.2 - 25.1)	27.5	(25.6 - 29.5)	49.4	(47.1 – 51.6)	
Region 2	1,838	25.7	(23.3 – 28.2)	24.1	(22.0 - 26.4)	50.2	(47.5 – 52.9)	
Genesee	1,317	25.9	(23.1 – 28.9)	22.1	(19.7 – 24.6)	52.1	(48.8 - 55.3)	
Lapeer	273	24.8	(19.3 – 31.3)	30.7	(24.9 - 37.2)	44.5	(37.8 - 51.4)	
Shiawassee	248	25.6	(19.2 – 33.2)	28.1	(22.1 – 35.0)	46.3	(38.9 - 53.9)	
Region 3	877	22.6	(19.4 – 26.2)	23.8	(20.8 – 27.1)	53.6	(49.7 – 57.4)	
Jackson	540	24.8	(20.6 – 29.4)	22.6	(19.1 – 26.6)	52.7	(47.7 - 57.5)	
Lenawee	337	19.3	(14.5 – 25.2)	25.7	(20.6 – 31.5)	55.0	(48.7 - 61.2)	
Region 4	2,051	22.2	(20.0 – 24.5)	25.1	(23.1 – 27.3)	52.7	(50.1 – 55.3)	
Barry-Eaton	641	23.1	(19.2 – 27.5)	28.6	(24.7 – 32.9)	48.3	(43.7 - 52.9)	
Mid-Michigan ^c	685	23.5	(19.9 - 27.4)	24.8	(21.4 - 28.5)	51.8	(47.4 - 56.1)	
Ingham	982	21.7	(18.6 – 25.2)	23.6	(20.8 – 26.6)	54.7	(50.9 - 58.4)	
Region 5	1,810	23.9	(21.6 – 26.4)	25.0	(22.7 – 27.3)	51.1	(48.3 – 53.9)	
Branch-Hillsdale-St. Joseph	529	29.3	(24.7 – 34.4)	26.4	(22.3 – 30.9)	44.3	(39.4 - 49.3)	
Calhoun	480	27.1	(22.5 – 32.3)	21.8	(17.9 – 26.2)	51.1	(45.7 - 56.5)	
Kalamazoo	801	18.4	(15.4 – 21.9)	26.0	(22.6 – 29.7)	55.6	(51.4 - 59.7)	
Region 6	1,063	25.4	(22.1 – 29.0)	23.5	(20.8 – 26.5)	51.2	(47.5 – 54.8)	
Van Buren-Cass	461	24.7	(19.9 – 30.2)	22.9	(19.0 - 27.4)	52.4	(46.8 - 57.9)	
Berrien	602	25.9	(21.5 – 30.8)	23.9	(20.3 – 28.0)	50.2	(45.4 – 55.1)	
Region 7	4,448	21.5	(19.9 – 23.2)	25.6	(24.1 – 27.2)	52.9	(51.0 – 54.8)	
Allegan	389	27.5	(22.5 - 33.2)	27.9	(23.1 – 33.2)	44.6	(38.9 - 50.4)	
Ionia	238	24.5	(18.3 – 31.9)	25.5	(19.8 – 32.2)	50.0	(42.6 - 57.4)	
Kent	2,689	21.5	(19.3 – 23.8)	24.1	(22.2 – 26.2)	54.4	(51.8 - 56.9)	
Mid-Michigan ^c	685	23.5	(19.9 – 27.4)	24.8	(21.4 – 28.5)	51.8	(47.4 - 56.1)	
Ottawa	875	16.6	(13.8 – 19.9)	27.3	(24.0 – 30.8)	56.1	(52.2 - 59.9)	

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Table 14 Cont'd								
Geographic Area	Sample Size	Curre	nt Smoking ^a	Former Smoking ^b Never Smol		r Smoked		
	n	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	
Michigan Total	32,111	23.0	(22.4 – 23.6)	26.0	(25.5 – 26.6)	50.9	(50.3 – 51.6)	
Region 8	1,646	26.0	(23.5 – 28.7)	26.9	(24.5 – 29.3)	47.1	(44.3 – 50.0)	
District #10	1,065	24.4	(21.4 – 27.7)	28.3	(25.3 – 31.4)	47.3	(43.9 - 50.8)	
Muskegon	581	28.7	(24.3 – 33.5)	24.6	(20.9 – 28.7)	46.8	(41.9 – 51.7)	
Region 9	1,742	24.8	(22.4 - 27.4)	31.5	(29.1 – 34.0)	43.7	(41.0 – 46.5)	
District #2	342	29.0	(23.3 – 35.4)	36.4	(30.8 – 42.5)	34.6	(28.7 - 40.9)	
District #4	392	27.6	(22.4 – 33.3)	27.1	(22.5 – 32.2)	45.3	(39.7 – 51.1)	
Northwest Michigan	495	24.2	(19.8 – 29.2)	30.5	(26.1 – 35.2)	45.3	(40.2 - 50.5)	
Benzie-Leelanau	192	14.8	(9.6 – 22.1)	32.7	(25.7 – 40.6)	52.5	(44.2 - 60.6)	
Grand Traverse	321	24.1	(18.8 – 30.2)	32.3	(26.8 - 38.4)	43.6	(37.5 - 50.0)	
Region 10	1,560	23.0	(20.5 – 25.8)	26.6	(24.2 – 29.2)	50.3	(47.3 - 53.3)	
Bay	383	22.1	(17.1 – 28.1)	27.8	(22.9 – 33.3)	50.1	(43.9 – 56.2)	
Huron	132	22.0	(14.2 – 32.5)	27.2	(19.6 – 36.3)	50.9	(40.8 - 60.9)	
Saginaw	671	22.4	(18.8 - 26.4)	25.2	(21.7 – 29.1)	52.4	(47.9 - 56.8)	
Sanilac	172	33.1	(24.8 – 42.5)	23.8	(17.3 – 31.7)	43.1	(34.6 – 52.1)	
Tuscola	202	20.1	(14.1 – 27.8)	31.1	(24.0 – 39.2)	48.8	(40.7 – 57.0)	
Region 11	1,510	24.8	(21.8 – 28.0)	25.9	(23.3 – 28.7)	49.3	(45.9 - 52.7)	
Central Michigan	756	27.5	(23.7 – 31.7)	27.6	(24.2 – 31.2)	44.9	(40.7 - 49.2)	
Midland	754	19.3	(15.1 – 24.4)	22.6	(18.6 – 27.0)	58.2	(52.6 – 63.5)	
Region 12	1,350	22.8	(20.2 – 25.6)	32.1	(29.3 – 35.0)	45.1	(42.0 - 48.3)	
Luce-Mackinac-Alger-Schoolcraft	177	30.1	(22.4 - 39.2)	33.2	(25.8 – 41.6)	36.6	(28.7 – 45.4)	
Western Upper Peninsula	281	21.2	(16.1 – 27.5)	35.5	(29.3 – 42.2)	43.3	(36.4 - 50.4)	
Delta-Menominee	300	20.4	(15.3 – 26.6)	31.0	(25.3 – 37.3)	48.6	(42.0 – 55.3)	
Chippewa	136	30.4	(21.9 – 40.5)	29.9	(21.8 – 39.4)	39.7	(30.4 - 49.9)	
Dickinson-Iron	199	20.9	(15.1 – 28.0)	32.9	(25.9 – 40.9)	46.2	(38.0 - 54.6)	
Marquette	257	19.4	(14.3 – 25.7)	29.5	(23.8 – 36.0)	51.1	(44.0 – 58.2)	

^a The proportion who reported that they had ever smoked at least 100 cigarettes (five packs) in their life and that they smoke cigarettes now, either every day or on some days.

The proportion who reported that they had ever smoked at least 100 cigarettes (five packs) in their life, but they do not smoke cigarettes now.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 15: Alcohol Consumption Michigan BRFSS, 2002-2006 Combined							
Geographic Area		Heavy [Drinking ^a		Binge Drinking ^b		
	n	%	95% Confidence Interval	n	%	95% Confidence Interval	
Michigan Total	31,719	5.5	(5.2 – 5.8)	31,906	17.0	(16.5 – 17.6)	
Region 1	12,060	5.1	(4.6 - 5.6)	12,141	16.2	(15.4 – 17.1)	
Livingston	491	7.3	(4.8 - 11.0)	494	20.6	(16.4 – 25.5)	
Macomb	1,914	5.9	(4.7 - 7.5)	1,918	18.3	(16.2 - 20.7)	
Monroe	469	3.3	(2.1 - 5.3)	474	19.0	(14.6 - 24.4)	
Oakland	3,264	5.0	(4.1 - 6.1)	3,286	15.2	(13.7 – 16.9)	
St. Clair	511	8.6	(6.1 – 12.1)	515	19.9	(15.9 – 24.6)	
Washtenaw	1,005	5.2	(3.7 - 7.2)	1,013	15.6	(12.9 – 18.7)	
City of Detroit	1,656	2.9	(2.1 - 4.1)	1,669	12.0	(10.2 – 14.1)	
Wayne exc. Detroit	2,708	5.5	(4.5 - 6.7)	2,729	17.6	(15.8 – 19.6)	
Region 2	1,812	4.9	(3.8 - 6.3)	1,827	16.5	(14.4 – 18.8)	
Genesee	1,301	4.8	(3.5 - 6.5)	1,308	14.8	(12.5 – 17.4)	
Lapeer	269	5.9	(3.2 - 10.8)	272	19.9	(14.6 – 26.6)	
Shiawassee	242	4.2	(2.0 - 8.6)	247	22.2	(15.9 – 30.0)	
Region 3	868	5.5	(3.8 - 7.8)	870	16.8	(13.7 – 20.4)	
Jackson	532	5.2	(3.4 - 7.9)	534	18.0	(14.1 – 22.7)	
Lenawee	336	5.9	(3.1 - 10.7)	336	14.9	(10.3 – 21.0)	
Region 4	2,027	6.6	(5.2 - 8.3)	2,033	18.0	(15.8 – 20.3)	
Barry-Eaton	629	5.3	(3.4 - 8.4)	635	16.4	(12.7 - 20.9)	
Mid-Michigan ^c	680	5.9	(4.0 - 8.5)	684	18.7	(15.3 – 22.7)	
Ingham	974	7.8	(5.7 - 10.6)	972	18.5	(15.4 – 22.0)	
Region 5	1,792	6.7	(5.3 - 8.4)	1,807	18.0	(15.7 – 20.5)	
Branch-Hillsdale-St. Joseph	524	6.6	(4.3 - 9.9)	527	15.8	(12.0 - 20.4)	
Calhoun	478	4.5	(2.6 - 7.6)	483	12.7	(9.2 - 17.3)	
Kalamazoo	790	8.0	(5.8 – 11.0)	797	22.6	(19.0 - 26.7)	
Region 6	1,047	6.0	(4.5 - 8.0)	1,058	15.6	(12.9 – 18.6)	
Van Buren-Cass	449	7.9	(5.3 – 11.7)	458	17.7	(13.5 – 22.9)	
Berrien	598	4.6	(3.0 - 7.0)	600	14.0	(10.8 – 17.8)	
Region 7	4,410	4.9	(4.1 - 5.8)	4,423	16.6	(15.1 – 18.1)	
Allegan	382	4.9	(3.0 - 8.0)	385	19.5	(14.9 – 25.1)	
Ionia	233	5.3	(2.6 – 10.8)	236	12.3	(8.2 – 18.0)	
Kent	2,670	4.8	(3.8 - 6.0)	2,673	16.9	(14.9 – 19.1)	
Mid-Michigan ^c	680	5.9	(4.0 - 8.5)	684	18.7	(15.3 – 22.7)	
Ottawa	869	4.6	(3.0 - 7.0)	871	15.2	(12.3 – 18.5)	

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Table 15 Cont'd							
Geographic Area	Heavy Drinking ^a			Binge Drinking ^b			
	n	%	95% Confidence Interval	n %		95% Confidence Interval	
Michigan Total	31,719	5.5	(5.2 – 5.8)	31,906	17.0	(16.5 – 17.6)	
Region 8	1,628	5.8	(4.5 - 7.3)	1,640	17.3	(15.1 – 19.7)	
District #10	1,051	5.1	(3.8 - 6.8)	1,063	17.5	(14.9 – 20.5)	
Muskegon	577	6.9	(4.6 – 10.1)	577	17.0	(13.4 – 21.3)	
Region 9	1,729	6.1	(4.9 - 7.6)	1,732	17.5	(15.4 – 20.0)	
District #2	342	5.0	(2.9 - 8.5)	342	17.9	(13.3 – 23.7)	
District #4	388	7.4	(5.0 - 10.9)	387	22.4	(17.4 - 28.3)	
Northwest Michigan	491	7.3	(4.7 – 11.0)	494	18.5	(14.4 - 23.4)	
Benzie-Leelanau	190	2.7	(1.2 – 6.2)	190	10.5	(6.3 – 16.8)	
Grand Traverse	318	5.8	(3.4 - 10.0)	319	14.2	(10.2 – 19.6)	
Region 10	1,526	6.1	(4.6 - 7.9)	1,545	19.2	(16.7 – 21.9)	
Bay	373	7.3	(4.2 – 12.3)	376	25.3	(19.8 – 31.9)	
Huron	127	6.7	(2.9 – 15.0)	131	19.8	(12.4 – 30.1)	
Saginaw	658	4.9	(3.2 - 7.5)	663	14.8	(11.7 – 18.5)	
Sanilac	169	8.4	(4.5 – 15.1)	172	21.3	(14.3 - 30.4)	
Tuscola	199	5.6	(2.3 – 13.0)	203	21.2	(14.6 – 29.7)	
Region 11	1,490	4.1	(2.9 - 5.9)	1,492	17.4	(14.8 – 20.4)	
Central Michigan	748	4.6	(2.9 – 7.1)	747	17.7	(14.5 – 21.5)	
Midland	742	3.3	(1.9 – 5.5)	745	16.9	(12.7 – 22.1)	
Region 12	1,330	7.6	(6.0 - 9.6)	1,338	22.8	(20.1 – 25.8)	
Luce-Mackinac-Alger-Schoolcraft	174	5.9	(3.1 – 10.9)	176	22.7	(15.7 – 31.8)	
Western Upper Peninsula	276	9.4	(5.6 – 15.4)	278	24.4	(18.4 – 31.5)	
Delta-Menominee	297	6.7	(4.0 – 11.0)	300	21.6	(16.5 – 27.8)	
Chippewa	133	10.8	(5.5 - 20.3)	135	29.2	(20.4 - 39.9)	
Dickinson-Iron	197	8.7	(4.9 – 15.0)	196	18.5	(12.2 – 27.0)	
Marquette	253	5.4	(3.0 - 9.6)	253	22.3	(16.4 – 29.6)	

The proportion who reported consuming on average more than two alcoholic beverages per day for men or more than one alcoholic beverage per day for women.

The proportion who reported consuming five or more drinks per occasion at least once in the previous month.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 16: Drove Motor Vehicle After Drinking Michigan BRFSS, 2002, 2004, and 2006 Combined						
Geographic Area	Drove M	lotor Veh	icle After Drinking ^a			
	n	%	95% Confidence Interval			
Michigan Total	16,442	2.9	(2.6 – 3.3)			
Region 1	5,986	3.0	(2.5 – 3.6)			
Livingston	245	0.4	(0.1 - 1.7)			
Macomb	952	2.9	(1.8 - 4.7)			
Monroe	250	4.2	(1.6 – 10.3)			
Oakland	1,553	3.4	(2.4 - 4.7)			
St. Clair	258	1.8	(0.5 - 5.7)			
Washtenaw	481	2.6	(1.3 – 5.1)			
City of Detroit	868	1.6	(0.8 - 3.1)			
Wayne exc. Detroit	1,361	4.4	(3.1 – 6.1)			
Region 2	900	2.3	(1.3 – 3.9)			
Genesee	653	2.2	(1.2 - 4.1)			
Lapeer	127	2.5	(0.8 - 7.6)			
Shiawassee	120	2.5	(0.4 – 15.5)			
Region 3	423	1.0	(0.3 - 2.7)			
Jackson	259	1.3	(0.4 - 4.1)			
Lenawee	164	0.5	(0.1 - 3.4)			
Region 4	993	1.9	(1.1 – 3.1)			
Barry-Eaton	296	1.3	(0.4 - 4.1)			
Mid-Michigan ^b	320	0.9	(0.3 - 2.9)			
Ingham	494	2.7	(1.4 – 5.0)			
Region 5	910	4.1	(2.7 – 6.2)			
Branch-Hillsdale-St. Joseph	270	2.5	(0.7 - 8.6)			
Calhoun	235	4.0	(1.8 - 8.5)			
Kalamazoo	405	5.2	(3.1 - 8.7)			
Region 6	547	2.4	(1.2 - 4.8)			
Van Buren-Cass	239	3.1	(1.2 – 8.1)			
Berrien	308	1.9	(0.7 - 5.1)			
Region 7	2,646	2.1	(1.5 – 3.0)			
Allegan	202	0.2	(0.0 - 1.6)			
Ionia	124	1.1	(0.1 - 7.1)			
Kent	1,792	2.5	(1.7 - 3.7)			
Mid-Michigan ^b	320	0.9	(0.3 - 2.9)			
Ottawa	411	2.8	(1.3 - 6.0)			

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Table 16 Cont'd				
Geographic Area	Drove M	Drove Motor Vehicle After Drinking ^a		
	n	%	95% Confidence Interval	
Michigan Total	16,442	2.9	(2.6 - 3.3)	
Region 8	823	4.6	(3.1 – 6.8)	
District #10	539	4.2	(2.6 - 6.8)	
Muskegon	284	5.3	(2.7 - 9.9)	
Region 9	825	2.9	(1.7 - 4.8)	
District #2	161	2.2	(0.7 - 6.8)	
District #4	181	6.7	(3.1 – 13.9)	
Northwest Michigan	225	2.5	(0.9 - 7.1)	
Benzie-Leelanau	91	0.9	(0.1 - 5.9)	
Grand Traverse	167	0.7	(0.1 - 5.1)	
Region 10	754	3.3	(2.0 - 5.4)	
Bay	195	4.4	(1.5 – 12.1)	
Huron	68	4.5	(1.4 – 13.5)	
Saginaw	309	1.6	(0.7 - 3.9)	
Sanilac	78	7.3	(2.6 – 18.8)	
Tuscola	104	2.9	(0.8 - 9.9)	
Region 11	960	4.4	(2.6 - 7.2)	
Central Michigan	383	4.9	(2.6 - 9.0)	
Midland	577	3.1	(1.3 - 7.2)	
Region 12	675	3.7	(2.3 - 5.8)	
Luce-Mackinac-Alger-Schoolcraft	94	0.5	(0.1 - 3.3)	
Western Upper Peninsula	133	6.1	(2.4 - 14.8)	
Delta-Menominee	152	1.5	(0.4 - 5.6)	
Chippewa	68	5.2	(1.6 – 15.4)	
Dickinson-Iron	96	5.4	(2.2 – 12.9)	
Marquette	132	3.8	(1.3 – 10.3)	

^a Proportion who reported that they had driven when they'd had too much to drink at least once in the previous month.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 17: Seatbelt Use Michigan BRFSS, 2002 and 2006 Combined			
Geographic Area	A	es a Seatbelt ^a	
	n	%	95% Confidence Interval
Michigan Total	11,499	85.6	(84.7 – 86.5)
Region 1	4,053	86.7	(85.3 – 88.0)
Livingston	155	94.1	(87.5 – 97.3)
Macomb	666	83.9	(79.6 – 87.4)
Monroe	157	92.3	(86.3 – 95.8)
Oakland	1,055	88.2	(85.6 - 90.4)
St. Clair	167	82.8	(74.7 - 88.7)
Washtenaw	328	90.7	(86.1 – 93.9)
City of Detroit	589	85.0	(81.0 – 88.2)
Wayne exc. Detroit	923	85.9	(82.5 – 88.6)
Region 2	615	84.7	(80.5 – 88.1)
Genesee	444	84.1	(79.0 – 88.1)
Lapeer	91	91.5	(83.9 – 95.7)
Shiawassee	80	80.1	(65.3 – 89.6)
Region 3	279	89.9	(84.6 – 93.5)
Jackson	168	93.9	(88.9 – 96.7)
Lenawee	111	83.9	(72.7 – 91.0)
Region 4	644	81.6	(77.3 – 85.3)
Barry-Eaton	192	82.6	(74.6 – 88.5)
Mid-Michigan ^b	212	82.2	(74.7 – 87.9)
Ingham	314	82.2	(75.4 – 87.5)
Region 5	603	86.0	(82.1 – 89.2)
Branch-Hillsdale-St. Joseph	171	85.1	(77.5 – 90.5)
Calhoun	166	85.5	(77.4 – 91.0)
Kalamazoo	266	87.0	(80.6 – 91.5)
Region 6	370	81.8	(76.0 – 86.4)
Van Buren-Cass	158	83.0	(73.7 – 89.5)
Berrien	212	80.8	(73.0 – 86.8)
Region 7	2,071	87.1	(84.8 – 89.0)
Allegan	137	82.7	(73.1 – 89.4)
Ionia	82	82.8	(69.8 - 90.9)
Kent	1,498	86.5	(83.6 – 89.0)
Mid-Michigan ^b	212	82.2	(74.7 – 87.9)
Ottawa	280	91.3	(86.7 – 94.4)

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Table 17 Cont'd				
Geographic Area	Al	Always Uses a Seatbelt ^a		
	n	%	95% Confidence Interval	
Michigan Total	11,499	85.6	(84.7 – 86.5)	
Region 8	557	82.8	(78.5 – 86.4)	
District #10	363	81.0	(75.4 – 85.5)	
Muskegon	194	85.7	(78.5 – 90.7)	
Region 9	555	84.2	(80.2 – 87.6)	
District #2	106	82.7	(73.1 – 89.3)	
District #4	127	89.0	(81.6 - 93.6)	
Northwest Michigan	146	80.2	(70.6 - 87.2)	
Benzie-Leelanau	58	77.8	(62.3 - 88.1)	
Grand Traverse	118	88.6	(79.1 – 94.1)	
Region 10	499	86.5	(82.3 - 89.9)	
Bay	129	90.6	(82.0 - 95.3)	
Huron	47	— c		
Saginaw	209	88.2	(81.3 – 92.7)	
Sanilac	52	81.7	(68.8 - 90.0)	
Tuscola	62	86.9	(71.3 - 94.7)	
Region 11	794	85.8	(81.5 – 89.3)	
Central Michigan	262	86.1	(80.3 - 90.5)	
Midland	532	85.3	(78.3 - 90.3)	
Region 12	459	81.9	(77.4 - 85.6)	
Luce-Mackinac-Alger-Schoolcraft	59	88.4	(76.4 - 94.7)	
Western Upper Peninsula	87	80.2	(67.0 - 89.0)	
Delta-Menominee	105	71.0	(59.6 - 80.3)	
Chippewa	43	_ c		
Dickinson-Iron	74	89.2	(79.3 - 94.7)	
Marquette	91	84.2	(74.0 - 90.9)	

^a The proportion who reported always using a seatbelt when driving or riding in a car.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health

department were included in the regional prevalence estimate.

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Table 18: No Routine Checkup in Past Year Michigan BRFSS, 2005-2006 Combined				
Geographic Area	Had No R	Had No Routine Checkup in Past Year ^a		
	n	%	95% Confidence Interval	
Michigan Total	17,580	30.1	(29.3 – 31.0)	
Region 1	7,023	28.9	(27.5 – 30.2)	
Livingston	277	36.7	(30.0 - 43.8)	
Macomb	1,152	29.9	(26.6 – 33.4)	
Monroe	265	33.3	(26.5 – 40.8)	
Oakland	1,931	27.7	(25.3 – 30.3)	
St. Clair	299	34.0	(27.4 – 41.3)	
Washtenaw	597	32.8	(28.2 – 37.6)	
City of Detroit	910	24.0	(20.6 – 27.8)	
Wayne exc. Detroit	1,563	29.0	(26.2 – 31.9)	
Region 2	1,069	29.8	(26.5 – 33.4)	
Genesee	758	28.1	(24.2 – 32.4)	
Lapeer	161	34.5	(26.4 – 43.6)	
Shiawassee	150	33.6	(24.6 – 44.0)	
Region 3	504	31.2	(26.4 – 36.5)	
Jackson	307	30.3	(24.2 – 37.0)	
Lenawee	197	32.7	(25.1 – 41.4)	
Region 4	1,154	32.2	(28.9 – 35.8)	
Barry-Eaton	371	32.0	(26.3 – 38.2)	
Mid-Michigan ^b	370	31.5	(26.0 – 37.5)	
Ingham	546	33.2	(28.2 – 38.5)	
Region 5	1,013	33.1	(29.5 – 36.9)	
Branch-Hillsdale-St. Joseph	269	35.8	(29.0 – 43.3)	
Calhoun	282	34.0	(27.1 – 41.7)	
Kalamazoo	462	31.0	(25.9 – 36.6)	
Region 6	606	32.4	(27.8 – 37.4)	
Van Buren-Cass	254	37.0	(29.8 – 44.9)	
Berrien	352	29.2	(23.5 – 35.6)	
Region 7	1,985	30.2	(27.8 – 32.8)	
Allegan	213	34.5	(26.9 – 42.9)	
Ionia	126	33.2	(23.8 – 44.2)	
Kent	1,006	27.3	(24.0 – 31.0)	
Mid-Michigan ^b	370	31.5	(26.0 - 37.5)	
Ottawa	507	32.8	(27.9 - 38.1)	

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Table 18 Cont'd			
Geographic Area	Had No Routine Checkup in Past Ye		
	n	%	95% Confidence Interval
Michigan Total	17,580	30.1	(29.3 – 31.0)
Region 8	956	31.5	(27.9 - 35.3)
District #10	615	33.0	(28.7 - 37.7)
Muskegon	341	29.0	(23.1 - 35.7)
Region 9	1,015	29.2	(25.7 – 32.8)
District #2	188	33.4	(25.3 - 42.5)
District #4	244	28.9	(22.3 - 36.5)
Northwest Michigan	292	24.7	(19.0 – 31.4)
Benzie-Leelanau	109	26.9	(17.9 - 38.4)
Grand Traverse	182	33.9	(25.7 - 43.2)
Region 10	863	29.6	(25.9 - 33.5)
Bay	199	23.5	(16.7 - 32.1)
Huron	67	37.0	(24.0 – 52.2)
Saginaw	388	30.6	(25.1 – 36.6)
Sanilac	100	31.5	(21.7 - 43.3)
Tuscola	109	31.2	(21.6 – 42.8)
Region 11	619	34.7	(30.2 - 39.4)
Central Michigan	422	33.1	(27.7 - 39.0)
Midland	197	37.6	(29.9 - 45.9)
Region 12	773	29.8	(26.0 - 33.9)
Luce-Mackinac-Alger-Schoolcraft	98	29.5	(19.6 – 41.9)
Western Upper Peninsula	162	35.1	(26.6 – 44.5)
Delta-Menominee	178	28.7	(21.0 – 37.8)
Chippewa	73	30.9	(19.3 – 45.6)
Dickinson-Iron	117	22.1	(14.8 – 31.7)
Marquette	145	30.6	(22.6 - 40.1)

^a The proportion who reported that they did not have a routine checkup in the past year.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 19: HIV Testing Among Adults Aged 18-64 Years Michigan BRFSS, 2002- 2006 Combined				
Geographic Area	E	Ever Had an HIV Test ^a		
	n	%	95% Confidence Interval	
Michigan Total	23,351	41.2	(40.4 – 41.9)	
Region 1	9,004	44.6	(43.4 – 45.9)	
Livingston	386	39.0	(33.5 – 44.7)	
Macomb	1,373	39.1	(36.1 – 42.1)	
Monroe	357	37.8	(31.9 – 44.0)	
Oakland	2,419	42.7	(40.4 – 45.1)	
St. Clair	403	39.1	(33.7 – 44.8)	
Washtenaw	808	41.1	(37.2 – 45.1)	
City of Detroit	1,246	60.5	(57.2 – 63.6)	
Wayne exc. Detroit	1,990	42.6	(40.0 - 45.2)	
Region 2	1,355	41.8	(38.7 – 44.9)	
Genesee	974	42.1	(38.4 – 45.8)	
Lapeer	212	33.6	(26.8 – 41.1)	
Shiawassee	169	49.9	(40.9 – 59.0)	
Region 3	610	36.2	(31.9 – 40.7)	
Jackson	381	37.8	(32.4 – 43.6)	
Lenawee	229	33.5	(26.7 – 41.1)	
Region 4	1,519	40.8	(37.9 – 43.8)	
Barry-Eaton	446	39.2	(33.9 – 44.8)	
Mid-Michigan ^b	501	34.1	(29.5 – 39.1)	
Ingham	759	45.0	(40.8 – 49.3)	
Region 5	1,271	42.2	(39.0 – 45.5)	
Branch-Hillsdale-St. Joseph	373	35.8	(30.3 – 41.7)	
Calhoun	327	43.8	(37.4 – 50.4)	
Kalamazoo	571	45.4	(40.6 – 50.3)	
Region 6	777	38.5	(34.4 – 42.7)	
Van Buren-Cass	322	38.5	(32.3 – 45.1)	
Berrien	455	38.5	(33.2 – 44.1)	
Region 7	3,343	37.5	(35.4 – 39.6)	
Allegan	283	37.6	(31.3 – 44.4)	
Ionia	165	31.4	(24.0 – 39.9)	
Kent	2,051	40.9	(38.1 – 43.8)	
Mid-Michigan ^b	501	34.1	(29.5 – 39.1)	
Ottawa	657	32.0	(28.0 - 36.3)	

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Table 19 Cont'd				
Geographic Area	E	Ever Had an HIV Test ^a		
	n	%	95% Confidence Interval	
Michigan Total	23,351	41.2	(40.4 – 41.9)	
Region 8	1,166	38.5	(35.2 – 41.9)	
District #10	755	36.9	(33.0 – 41.0)	
Muskegon	411	40.8	(35.3 - 46.6)	
Region 9	1,161	40.2	(36.9 - 43.5)	
District #2	214	31.1	(24.0 - 39.2)	
District #4	254	39.0	(32.3 - 46.2)	
Northwest Michigan	336	44.9	(38.7 – 51.2)	
Benzie-Leelanau	121	37.1	(27.9 - 47.2)	
Grand Traverse	236	44.1	(37.0 – 51.5)	
Region 10	1,115	34.8	(31.5 – 38.2)	
Bay	279	33.4	(26.9 - 40.6)	
Huron	93	24.3	(15.4 – 36.2)	
Saginaw	482	37.1	(32.2 - 42.2)	
Sanilac	114	39.8	(29.4 – 51.2)	
Tuscola	147	32.6	(24.5 – 41.9)	
Region 11	1,095	33.6	(29.9 - 37.5)	
Central Michigan	513	35.9	(31.1 – 41.1)	
Midland	582	29.3	(24.2 - 35.0)	
Region 12	935	38.2	(34.6 – 41.9)	
Luce-Mackinac-Alger-Schoolcraft	136	44.6	(35.1 – 54.5)	
Western Upper Peninsula	200	28.5	(21.9 - 36.2)	
Delta-Menominee	215	38.7	(31.2 - 46.7)	
Chippewa	97	45.5	(34.2 - 57.3)	
Dickinson-Iron	119	45.7	(35.2 - 56.6)	
Marquette	168	34.2	(26.6 - 42.7)	

Note: "Don't know" was considered a valid response.

^a Among those aged 18 - 64 years, the proportion who reported that they ever had been tested for HIV, apart from tests

that were part of a blood donation.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 20: Engaged in At-Risk Behaviors for Acquiring HIV Among Adults Aged 18-64 Years Michigan BRFSS, 2002-2005 Combined

Geographic Area	Enga	Engaged in At-Risk Behaviors for Acquiring HIV ^a		
	n	%	95% Confidence Interval	
Michigan Total	19,764	4.4	(4.0 - 4.8)	
Region 1	7,503	4.8	(4.2 - 5.4)	
Livingston	320	2.3	(1.0 – 5.2)	
Macomb	1,124	4.8	(3.5 - 6.7)	
Monroe	292	4.0	(2.0 - 8.0)	
Oakland	2,058	4.5	(3.5 - 5.9)	
St. Clair	336	4.5	(2.3 - 8.8)	
Washtenaw	683	3.7	(2.2 - 6.3)	
City of Detroit	1,037	6.5	(5.0 - 8.4)	
Wayne exc. Detroit	1,632	4.7	(3.5 - 6.1)	
Region 2	1,144	5.3	(3.8 - 7.4)	
Genesee	815	5.2	(3.5 - 7.8)	
Lapeer	179	6.4	(2.9 - 13.3)	
Shiawassee	150	4.5	(1.9 – 10.5)	
Region 3	513	4.1	(2.5 - 6.8)	
Jackson	322	3.6	(2.0 - 6.6)	
Lenawee	191	4.9	(2.1 – 11.0)	
Region 4	1,295	4.6	(3.3 - 6.5)	
Barry-Eaton	390	6.0	(3.4 - 10.4)	
Mid-Michigan ^b	443	3.7	(2.1 - 6.6)	
Ingham	629	4.9	(3.0 - 7.8)	
Region 5	1,065	4.8	(3.3 - 6.8)	
Branch-Hillsdale-St. Joseph	326	3.0	(1.3 - 6.9)	
Calhoun	272	5.7	(3.0 - 10.5)	
Kalamazoo	467	5.4	(3.2 - 9.1)	
Region 6	640	4.8	(3.0 - 7.8)	
Van Buren-Cass	263	3.7	(1.5 – 8.8)	
Berrien	377	5.7	(3.2 - 9.9)	
Region 7	2,924	4.2	(3.3 - 5.4)	
Allegan	234	2.5	(1.3 – 5.0)	
Ionia	139	9.4	(4.7 – 17.7)	
Kent	1,831	4.8	(3.5 - 6.7)	
Mid-Michigan ^b	443	3.7	(2.1 – 6.6)	
Ottawa	553	1.7	(0.9 - 3.3)	

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Table 20 Cont'd				
Geographic Area	Engag	Engaged in At-Risk Behaviors for Acquiring HIV ^a		
	n	%	95% Confidence Interval	
Michigan Total	19,764	4.4	(4.0 - 4.8)	
Region 8	979	4.1	(2.7 - 6.0)	
District #10	631	4.5	(2.7 - 7.3)	
Muskegon	348	3.4	(1.8 - 6.4)	
Region 9	988	3.4	(2.1 - 5.5)	
District #2	189	4.6	(1.6 - 12.7)	
District #4	217	2.9	(1.0 - 7.9)	
Northwest Michigan	284	4.7	(2.1 - 10.1)	
Benzie-Leelanau	104	0.6	(0.1 - 4.2)	
Grand Traverse	194	2.6	(1.1 - 6.1)	
Region 10	959	2.5	(1.4 - 4.3)	
Bay	232	0.7	(0.2 - 2.6)	
Huron	79	3.4	(0.9 - 12.9)	
Saginaw	411	2.9	(1.3 - 6.4)	
Sanilac	105	4.2	(0.9 - 17.4)	
Tuscola	132	2.0	(0.5 - 7.5)	
Region 11	980	3.9	(2.4 - 6.2)	
Central Michigan	432	3.8	(2.1 - 6.6)	
Midland	548	4.2	(1.9 - 9.0)	
Region 12	774	2.4	(1.3 - 4.5)	
Luce-Mackinac-Alger-Schoolcraft	111	0.0°		
Western Upper Peninsula	167	1.6	(0.5 - 4.4)	
Delta-Menominee	175	1.7	(0.4 - 6.5)	
Chippewa	86	2.9	(0.7 - 11.4)	
Dickinson-Iron	93	4.6	(0.7 - 25.6)	
Marquette	142	4.5	(1.7 - 11.4)	

^a Among those aged 18 - 64 years, the proportion who reported that they had done at least one of the following in the past year:

Used intravenous drugs.Been treated for a sexually transmitted or venereal disease.

⁻ Given or received money or drugs in exchange for sex. - Had anal sex without a condom.

b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Numerator sample size was 0.

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Table 21: Breast Cancer Screening Among Women Age 40 and Older Michigan BRFSS, 2002, 2004, and 2006 Combined			
Geographic Area		Breast Exam and n in Past Year ^a	
	n	%	95% Confidence Interval
Michigan Total	7,202	55.7	(54.3 – 57.0)
Region 1	2,631	54.7	(52.5 – 56.9)
Livingston	101	63.4	(52.8 – 72.9)
Macomb	414	53.9	(48.4 – 59.2)
Monroe	117	63.2	(52.8 – 72.5)
Oakland	690	58.9	(54.7 – 63.0)
St. Clair	108	51.7	(41.1 – 62.1)
Washtenaw	201	64.9	(57.2 – 71.9)
City of Detroit	390	47.2	(41.5 – 53.0)
Wayne exc. Detroit	602	50.8	(46.3 – 55.3)
Region 2	388	57.0	(51.4 – 62.5)
Genesee	275	62.9	(56.4 – 69.0)
Lapeer	50	25.7	(15.1 – 40.3)
Shiawassee	63	56.1	(42.6 – 68.8)
Region 3	193	58.1	(50.2 – 65.7)
Jackson	116	53.7	(43.7 – 63.3)
Lenawee	77	64.8	(51.6 – 76.0)
Region 4	411	56.7	(51.2 – 62.0)
Barry-Eaton	120	57.4	(47.1 – 67.1)
Mid-Michigan ^b	133	55.0	(45.3 – 64.4)
Ingham	210	57.0	(49.3 – 64.4)
Region 5	400	49.0	(43.4 – 54.6)
Branch-Hillsdale-St. Joseph	109	42.0	(32.5 – 52.3)
Calhoun	108	57.9	(47.3 – 67.8)
Kalamazoo	183	48.3	(39.8 – 56.8)
Region 6	249	52.0	(45.2 – 58.7)
Van Buren-Cass	114	49.4	(39.4 – 59.4)
Berrien	135	54.2	(45.0 – 63.2)
Region 7	1,075	57.1	(53.4 – 60.7)
Allegan	94	58.3	(46.9 – 68.8)
Ionia	50	56.3	(41.1 – 70.4)
Kent	714	54.6	(49.9 – 59.1)
Mid-Michigan ^b	133	55.0	(45.3 – 64.4)
Ottawa	165	63.1	(54.7 – 70.7)

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Table 21 Cont'd				
Geographic Area		Had Clinical Breast Exam and Mammogram in Past Year ^a		
	n	%	95% Confidence Interval	
Michigan Total	7,202	55.7	(54.3 – 57.0)	
Region 8	357	59.5	(53.6 – 65.1)	
District #10	245	57.0	(50.0 - 63.7)	
Muskegon	112	64.5	(53.3 – 74.2)	
Region 9	398	59.3	(53.9 - 64.5)	
District #2	82	50.8	(39.0 - 62.6)	
District #4	84	50.5	(38.8 - 62.2)	
Northwest Michigan	104	59.8	(49.3 - 69.5)	
Benzie-Leelanau	47	— c		
Grand Traverse	81	72.0	(59.2 – 81.9)	
Region 10	333	57.7	(51.6 – 63.6)	
Bay	83	58.9	(46.6 - 70.2)	
Huron	33	— c		
Saginaw	133	64.9	(55.2 - 73.6)	
Sanilac	33	— c		
Tuscola	51	51.2	(36.2 - 66.1)	
Region 11	419	60.1	(53.5 - 66.3)	
Central Michigan	175	60.9	(52.7 - 68.6)	
Midland	244	58.1	(47.9 - 67.6)	
Region 12	348	54.0	(47.9 - 59.9)	
Luce-Mackinac-Alger-Schoolcraft	42	— c		
Western Upper Peninsula	72	46.2	(34.1 – 58.7)	
Delta-Menominee	85	56.5	(44.4 - 68.0)	
Chippewa	33	_ c	·	
Dickinson-Iron	52	52.1	(36.2 - 67.5)	
Marquette	64	61.5	(46.8 - 74.4)	

Note: Data included diagnostic tests.

^a Among women aged 40 years and older, the proportion who had both a clinical breast exam and mammogram in the previous year.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are

Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

Table 22: Cervical Cancer Screening Among Women Aged 18 Years and Older Michigan BRFSS, 2002, 2004, and 2006 Combined				
Geographic Area	Had Ap	Had Appropriately Timed Pap Test		
	n	%	95% Confidence Interval	
Michigan Total	9,905	83.5	(82.6 – 84.4)	
Region 1	3,685	84.3	(82.8 – 85.6)	
Livingston	144	90.1	(82.8 – 94.6)	
Macomb	578	83.2	(79.5 – 86.4)	
Monroe	162	84.5	(77.1 – 89.9)	
Oakland	957	86.2	(83.2 – 88.8)	
St. Clair	154	80.9	(72.1 – 87.4)	
Washtenaw	294	82.8	(76.9 – 87.5)	
City of Detroit	564	83.0	(79.2 – 86.1)	
Wayne exc. Detroit	821	84.4	(81.1 – 87.1)	
Region 2	545	81.6	(77.2 – 85.3)	
Genesee	391	81.5	(76.2 – 85.8)	
Lapeer	74	72.3	(57.7 – 83.3)	
Shiawassee	80	92.0	(83.2 – 96.4)	
Region 3	243	86.4	(80.3 – 90.9)	
Jackson	152	84.5	(76.7 – 90.1)	
Lenawee	91	89.8	(77.9 – 95.6)	
Region 4	583	87.5	(83.8 – 90.5)	
Barry-Eaton	167	88.7	(82.2 – 93.0)	
Mid-Michigan ^b	182	85.5	(77.3 – 91.0)	
Ingham	305	87.1	(81.3 – 91.3)	
Region 5	548	82.7	(78.8 – 86.0)	
Branch-Hillsdale-St. Joseph	149	79.6	(72.2 – 85.5)	
Calhoun	149	79.9	(71.9 – 86.1)	
Kalamazoo	250	86.0	(79.7 - 90.5)	
Region 6	324	75.2	(69.1 – 80.4)	
Van Buren-Cass	146	76.8	(67.0 – 84.4)	
Berrien	178	73.8	(65.7 – 80.5)	
Region 7	1,553	85.9	(83.2 – 88.2)	
Allegan	123	87.0	(79.3 – 92.1)	
Ionia	69	84.7	(71.6 – 92.4)	
Kent	1,062	86.6	(83.1 – 89.5)	
Mid-Michigan ^b	182	85.5	(77.3 – 91.0)	
Ottawa	228	84.4	(77.5 - 89.4)	

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Table	Table 22 Cont'd								
Geographic Area	Had Ap	Had Appropriately Timed Pap Test ^a							
	n	%	95% Confidence Interval						
Michigan Total	9,905	83.5	(82.6 – 84.4)						
Region 8	505	81.2	(76.8 – 85.0)						
District #10	332	79.5	(73.8 - 84.2)						
Muskegon	173	84.1	(76.5 - 89.6)						
Region 9	492	84.0	(80.2 - 87.2)						
District #2	102	74.4	(64.2 - 82.4)						
District #4	103	88.9	(81.1 - 93.8)						
Northwest Michigan	136	80.7	(72.0 - 87.2)						
Benzie-Leelanau	54	89.3	(78.2 – 95.1)						
Grand Traverse	97	90.1	(82.5 - 94.6)						
Region 10	447	82.8	(78.5 - 86.4)						
Bay	116	84.3	(75.7 - 90.2)						
Huron	40	— °							
Saginaw	183	88.6	(82.7 - 92.7)						
Sanilac	44	– °							
Tuscola	64	68.2	(53.6 – 79.9)						
Region 11	567	81.5	(76.4 - 85.8)						
Central Michigan	226	84.0	(77.9 - 88.7)						
Midland	341	76.2	(66.2 - 83.9)						
Region 12	413	77.6	(72.1 - 82.3)						
Luce-Mackinac-Alger-Schoolcraft	51	76.9	(60.9 - 87.6)						
Western Upper Peninsula	82	78.0	(67.0 - 86.0)						
Delta-Menominee	95	88.0	(78.7 - 93.6)						
Chippewa	42	_ d	,						
Dickinson-Iron	65	68.0	(52.1 – 80.6)						
Marquette	78	75.4	(58.8 - 86.8)						

Note: Data included diagnostic tests.

^a Among women aged 18 years and older, the proportion who had a Pap test within the previous three years.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health

department were included in the regional prevalence estimate.

Table 23: Prostate Cancer Screening Among Men Aged 50 and Older Michigan BRFSS, 2002, 2004, and 2006 Combined							
Geographic Area	H	Had PSA in Past Year ^a					
	n	%	95% Confidence Interval				
Michigan Total	3,017	58.5	(56.5 – 60.5)				
Region 1	1,033	59.6	(56.1 – 63.0)				
Livingston	46	– c					
Macomb	165	62.9	(54.6 - 70.4)				
Monroe	42	– c	,				
Oakland	284	62.6	(56.0 – 68.8)				
St. Clair	49	– c	,				
Washtenaw	81	68.1	(55.9 – 78.2)				
City of Detroit	132	58.6	(48.4 – 68.2)				
Wayne exc. Detroit	230	54.9	(47.5 – 62.2)				
Region 2	159	62.7	(54.0 – 70.7)				
Genesee	110	59.9	(49.3 – 69.7)				
Lapeer	29	_ c	(1010 0011)				
Shiawassee	20	– c					
Region 3	89	58.3	(46.8 – 69.0)				
Jackson	55	47.3	(33.6 – 61.3)				
Lenawee	34	_ c	(00.0 01.0)				
Region 4	199	55.4	(47.6 – 62.9)				
Barry-Eaton	68	66.4	(53.0 – 77.6)				
Mid-Michigan ^b	65	53.0	(39.3 – 66.2)				
Ingham	86	50.6	(39.4 – 61.7)				
Region 5	166	61.7	(53.6 – 69.2)				
Branch-Hillsdale-St. Joseph	58	58.2	(44.3 – 71.0)				
Calhoun	38	_ °	(44.5 / 1.0)				
Kalamazoo	70	65.7	(53.4 – 76.3)				
Region 6	100	50.5	(39.5 – 61.4)				
Van Buren-Cass	41	_ °	(55.5 61.4)				
Berrien	59	52.9	(38.3 – 66.9)				
Region 7	451	56.3	(50.6 – 61.8)				
Allegan	32	_ °	(55.5 – 51.5)				
Ionia	24	_ c					
Kent	294	52.7	(45.5 – 59.9)				
Mid-Michigan ^b	65	53.0	(39.3 – 66.2)				
Ottawa	81	67.3	(55.8 – 77.1)				

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Table	23 Cont'd					
Geographic Area	ı	Had PSA in Past Year ^a				
	n	%	95% Confidence Interval			
Michigan Total	3,017	58.5	(56.5 – 60.5)			
Region 8	160	60.7	(52.3 – 68.6)			
District #10	104	64.2	(53.9 - 73.3)			
Muskegon	56	55.0	(40.6 - 68.7)			
Region 9	185	62.9	(55.2 - 70.0)			
District #2	41	– °				
District #4	41	– c				
Northwest Michigan	51	42.6	(29.1 – 57.3)			
Benzie-Leelanau	19	– °				
Grand Traverse	33	– °				
Region 10	152	56.1	(47.4 - 64.4)			
Bay	44	— c				
Huron	14	— c				
Saginaw	58	62.7	(48.3 - 75.2)			
Sanilac	18	— c				
Tuscola	18	— °				
Region 11	187	55.8	(46.3 - 64.9)			
Central Michigan	79	55.7	(43.9 - 66.8)			
Midland	108	56.2	(41.0 - 70.2)			
Region 12	136	52.8	(43.7 – 61.6)			
Luce-Mackinac-Alger-Schoolcraft	20	— c	·			
Western Upper Peninsula	28	— c				
Delta-Menominee	24	_ c				
Chippewa	11	_ c				
Dickinson-Iron	17	— c				
Marquette	36	– c				

Note: Men who had been diagnosed with prostate cancer were excluded.

^a Among men aged 50 years and older, the proportion who reported having a PSA in the past year.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health

department were included in the regional prevalence estimate.

Geographic Area	На	Had Blood Stool Test in Past Two Years ^a			Had Sigmoidoscopy or Colonoscopy in Past 5 Years ^b			
	n	%	95% Confidence Interval	n	%	95% Confidence Interval		
Michigan Total	8,222	31.0	(29.8 – 32.2)	8,227	50.6	(49.3 – 51.8)		
Region 1	2,898	27.9	(26.0 – 29.9)	2,910	52.3	(50.2 – 54.5)		
Livingston	114	23.2	(15.6 – 33.3)	114	49.3	(39.5 – 59.1)		
Macomb	469	29.6	(25.1 – 34.6)	470	54.6	(49.4 – 59.6)		
Monroe	128	22.2	(15.2 – 31.1)	128	38.3	(29.4 – 48.0)		
Oakland	758	29.6	(25.9 – 33.7)	769	55.9	(51.8 – 59.9)		
St. Clair	122	26.4	(18.6 – 36.1)	119	50.6	(40.6 – 60.5)		
Washtenaw	223	30.9	(24.4 – 38.3)	226	57.3	(49.8 – 64.5)		
City of Detroit	400	27.9	(22.8 – 33.5)	395	52.8	(46.9 – 58.7)		
Wayne exc. Detroit	673	26.4	(22.8 – 30.4)	678	47.6	(43.3 – 52.0)		
Region 2	445	33.4	(28.6 – 38.5)	442	45.5	(40.2 – 50.8)		
Genesee	313	36.1	(30.2 - 42.4)	312	44.6	(38.3 – 51.0)		
Lapeer	60	24.4	(14.5 – 37.9)	58	37.7	(25.3 – 52.0)		
Shiawassee	72	28.5	(18.6 – 41.0)	72	56.8	(44.0 - 68.8)		
Region 3	231	24.9	(19.3 – 31.4)	231	49.3	(42.1 – 56.4)		
Jackson	132	33.1	(25.2 – 42.2)	133	52.0	(42.7 – 61.1)		
Lenawee	99	14.6	(8.2 – 24.5)	98	45.7	(34.8 – 57.1)		
Region 4	479	33.3	(28.8 – 38.2)	485	55.2	(50.2 – 60.1)		
Barry-Eaton	156	41.1	(32.9 – 49.9)	155	57.5	(48.9 – 65.7)		
Mid-Michigan ^c	148	31.0	(23.4 – 39.9)	155	52.9	(43.9 – 61.8)		
Ingham	229	29.3	(23.3 – 36.2)	230	55.0	(47.7 – 62.1)		
Region 5	470	36.8	(32.0 – 42.0)	468	48.0	(42.9 – 53.1)		
Branch-Hillsdale-St. Joseph	143	33.5	(25.5 – 42.5)	141	42.0	(33.5 – 51.1)		
Calhoun	118	32.1	(23.6 – 42.0)	118	47.9	(38.1 – 57.9)		
Kalamazoo	209	42.1	(34.4 – 50.2)	209	52.3	(44.5 – 60.1)		
Region 6	291	28.6	(23.1 – 34.7)	286	38.8	(32.8 – 45.3)		
Van Buren-Cass	132	29.7	(21.6 – 39.2)	131	35.8	(27.3 – 45.3)		
Berrien	159	27.8	(20.8 – 36.1)	155	41.1	(32.8 – 50.0)		

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Table 24 Cont'd									
Geographic Area	Had Blood Stool Test in Past Two Years ^a			Had Sigmoidoscopy or Colonoscopy in Past 5 Years ^b					
	n	%	95% Confidence Interval	n	%	95% Confidence Interval			
Michigan Total	8,222	31.0	(29.8 – 32.2)	8,227	50.6	(49.3 – 51.8)			
Region 7	1,167	36.1	(32.8 – 39.5)	1,167	54.5	(51.0 – 58.0)			
Allegan	101	27.8	(19.1 - 38.6)	100	40.5	(30.5 - 51.4)			
Ionia	60	30.9	(19.3 - 45.4)	58	57.5	(42.7 - 71.1)			
Kent	769	38.1	(33.8 - 42.4)	768	54.6	(50.2 - 59.0)			
Mid-Michigan ^c	148	31.0	(23.4 - 39.9)	155	52.9	(43.9 - 61.8)			
Ottawa	183	38.9	(31.3 - 47.0)	186	61.5	(53.7 - 68.8)			
Region 8	441	27.8	(23.5 – 32.6)	440	50.1	(44.8 - 55.3)			
District #10	295	29.2	(23.9 - 35.1)	295	48.9	(42.7 - 55.2)			
Muskegon	146	25.2	(18.1 - 33.9)	145	52.2	(42.7 - 61.5)			
Region 9	501	34.1	(29.7 – 38.8)	499	50.4	(45.6 – 55.2)			
District #2	111	24.5	(17.0 – 33.9)	110	42.7	(32.9 - 53.0)			
District #4	104	41.5	(31.7 – 52.1)	102	55.7	(45.1 - 65.8)			
Northwest Michigan	134	36.2	(27.8 – 45.6)	136	46.0	(37.1 - 55.2)			
Benzie-Leelanau	56	37.4	(24.9 – 51.8)	56	52.9	(38.9 - 66.4)			
Grand Traverse	96	31.6	(22.1 – 43.0)	95	57.7	(46.5 – 68.1)			
Region 10	410	34.4	(29.4 - 39.8)	407	47.0	(41.6 – 52.5)			
Вау	105	42.0	(31.9 – 52.9)	103	51.1	(40.3 - 61.9)			
Huron	42	_ d		41	_ d				
Saginaw	165	39.5	(31.4 – 48.3)	163	50.4	(41.7 – 59.1)			
Sanilac	41	_ d		41	– d				
Tuscola	57	23.3	(13.4 – 37.6)	59	35.6	(23.3 - 50.1)			
Region 11	501	35.8	(30.5 - 41.6)	500	50.8	(44.9 - 56.6)			
Central Michigan	220	31.8	(25.4 - 38.9)	220	48.3	(41.1 – 55.6)			
Midland	281	46.3	(37.2 – 55.7)	280	56.9	(47.8 - 65.5)			
Region 12	388	29.1	(24.2 – 34.5)	392	44.4	(39.0 - 49.9)			
Luce-Mackinac-Alger-Schoolcraft	50	21.8	(12.0 - 36.4)	51	41.9	(28.4 - 56.7)			
Western Upper Peninsula	87	20.2	(12.7 – 30.7)	86	41.6	(30.8 - 53.4)			
Delta-Menominee	83	31.2	(20.7 – 44.1)	83	43.4	(32.0 - 55.5)			
Chippewa	34	_ d	-	36	– d				
Dickinson-Iron	56	34.2	(21.4 – 49.7)	58	41.8	(28.4 - 56.6)			
Marquette	78	36.9	(25.9 - 49.5)	78	57.8	(45.3 - 69.3)			

^a Among those aged 50 years and older, the proportion who had a blood stool test within the past two years using a home kit.
^b Among those aged 50 years and older, the proportion who had a sigmoidoscopy or colonscopy within the past five years.

Right-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

d Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

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Table 25: Oral Health Michigan BRFSS, 2002, 2004, and 2006 Combined									
Geographic Area	No E	ental Vis	it in Past Year ^a	Lost 6+ Teeth ^b					
	n	%	95% Confidence Interval	n	%	95% Confidence Interval			
Michigan Total	16,426	24.4	(23.6 – 25.3)	16,225	16.2	(15.6 – 16.9)			
Region 1	5,996	23.4	(22.1 – 24.7)	5,917	15.7	(14.7 – 16.8)			
Livingston	245	18.1	(13.1 – 24.5)	241	8.6	(5.7 – 12.7)			
Macomb	953	22.2	(19.1 – 25.6)	948	14.8	(12.5 – 17.3)			
Monroe	250	20.4	(15.2 – 26.9)	247	12.1	(8.7 – 16.7)			
Oakland	1557	17.0	(14.9 – 19.5)	1538	12.6	(10.8 – 14.5)			
St. Clair	259	23.0	(17.3 – 29.9)	253	13.4	(9.9 – 17.9)			
Washtenaw	483	20.7	(16.6 – 25.6)	476	6.8	(4.7 - 9.8)			
City of Detroit	866	37.9	(34.1 – 41.8)	853	26.9	(23.7 – 30.4)			
Wayne exc. Detroit	1361	21.6	(19.0 – 24.4)	1342	15.8	(13.8 – 18.1)			
Region 2	896	26.7	(23.3 – 30.5)	886	15.5	(13.1 – 18.2)			
Genesee	649	27.3	(23.3 – 31.8)	643	16.2	(13.4 – 19.5)			
Lapeer	127	22.6	(15.1 – 32.5)	127	10.1	(5.7 – 17.2)			
Shiawassee	120	27.8	(19.2 – 38.5)	116	17.5	(11.4 – 26.0)			
Region 3	425	24.9	(20.3 – 30.1)	422	20.9	(17.0 – 25.6)			
Jackson	262	26.6	(20.8 – 33.4)	260	21.2	(16.3 – 27.2)			
Lenawee	163	22.1	(15.3 – 30.9)	162	20.5	(14.5 – 28.2)			
Region 4	992	22.0	(18.9 – 25.4)	980	13.1	(10.9 – 15.7)			
Barry-Eaton	297	19.9	(15.0 – 26.0)	288	12.1	(8.6 – 16.6)			
Mid-Michigan ^c	317	24.3	(18.8 – 30.8)	317	17.1	(12.8 – 22.6)			
Ingham	493	23.6	(19.2 – 28.6)	490	11.5	(8.7 – 15.0)			
Region 5	905	28.6	(25.1 – 32.3)	895	17.2	(14.7 – 20.0)			
Branch-Hillsdale-St. Joseph	267	32.6	(26.0 – 39.9)	263	20.6	(15.9 – 26.4)			
Calhoun	234	30.3	(23.7 – 37.7)	234	19.3	(14.4 – 25.3)			
Kalamazoo	404	24.8	(20.1 – 30.3)	398	13.6	(10.4 – 17.6)			
Region 6	545	29.7	(25.2 – 34.6)	534	16.9	(14.0 – 20.4)			
Van Buren-Cass	239	26.6	(20.6 – 33.7)	233	18.0	(13.6 – 23.3)			
Berrien	306	32.0	(25.9 – 38.8)	301	16.2	(12.3 – 20.9)			

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Table 25 Cont'd									
Geographic Area	No Dental Visit in Past Year ^a			Lost 6+ Teeth ^b					
	n	%	95% Confidence Interval	n	%	95% Confidence Interval			
Michigan Total	16,426	24.4	(23.6 – 25.3)	16,225	16.2	(15.6 – 16.9)			
Region 7	2,640	22.4	(20.3 – 24.6)	2,618	12.5	(11.1 – 14.1)			
Allegan	202	27.0	(20.3 - 35.0)	197	15.3	(10.7 – 21.5)			
Ionia	125	26.6	(18.0 - 37.5)	123	17.6	(10.9 - 27.2)			
Kent	1790	20.8	(18.2 - 23.6)	1778	12.9	(11.1 – 14.8)			
Mid-Michigan ^c	317	24.3	(18.8 - 30.8)	317	17.1	(12.8 – 22.6)			
Ottawa	408	20.4	(16.1 – 25.5)	405	8.3	(6.0 – 11.3)			
Region 8	820	24.5	(21.2 – 28.2)	803	20.0	(17.1 – 23.2)			
District #10	536	26.7	(22.6 - 31.4)	522	21.6	(18.1 – 25.7)			
Muskegon	284	21.0	(15.8 - 27.3)	281	17.5	(13.0 – 23.1)			
Region 9	825	28.8	(25.3 – 32.6)	816	19.9	(17.2 – 23.0)			
District #2	163	33.3	(25.6 - 42.0)	159	29.3	(22.3 - 37.5)			
District #4	180	31.7	(24.3 - 40.1)	182	23.6	(17.8 - 30.7)			
Northwest Michigan	225	27.9	(21.4 - 35.4)	220	21.0	(15.7 – 27.4)			
Benzie-Leelanau	91	29.1	(19.7 – 40.7)	89	10.0	(5.6 – 17.4)			
Grand Traverse	166	22.6	(15.3 – 32.0)	166	10.8	(6.8 – 16.8)			
Region 10	755	21.4	(18.1 – 25.0)	742	16.6	(13.9 – 19.7)			
Bay	195	15.9	(10.6 – 23.1)	191	11.7	(7.9 – 16.9)			
Huron	69	20.3	(11.1 – 34.1)	66	8.3	(3.7 - 17.3)			
Saginaw	310	19.2	(14.7 - 24.7)	305	15.7	(11.9 – 20.6)			
Sanilac	78	31.7	(21.6 – 43.9)	77	29.4	(19.6 – 41.7)			
Tuscola	103	31.8	(22.0 – 43.6)	103	25.2	(16.8 – 35.9)			
Region 11	957	25.7	(21.9 – 30.0)	945	20.3	(17.2 – 23.8)			
Central Michigan	378	28.7	(23.5 - 34.4)	373	23.1	(18.9 – 27.9)			
Midland	579	19.6	(14.9 – 25.4)	572	14.4	(10.7 – 19.2)			
Region 12	670	27.8	(24.0 – 32.0)	667	20.0	(16.9 – 23.4)			
Luce-Mackinac-Alger-Schoolcraft	93	28.1	(19.0 - 39.4)	94	19.3	(11.9 – 29.7)			
Western Upper Peninsula	133	29.5	(20.8 - 39.9)	132	20.6	(14.4 - 28.4)			
Delta-Menominee	152	26.3	(18.9 - 35.3)	150	17.9	(12.2 – 25.4)			
Chippewa	67	36.1	(24.2 - 50.0)	68	29.2	(19.0 – 42.0)			
Dickinson-Iron	95	28.1	(18.9 – 39.6)	93	25.0	(16.5 – 36.1)			
Marquette	130	23.7	(16.1 – 33.3)	130	14.2	(9.2 - 21.3)			

The proportion who reported that they had not visited a dentist or dental clinic for any reason in the previous year.

The proportion who reported that they were missing 6+ teeth due to tooth decay or gum disease. This excludes teeth lost for other reasons, such as

injury or orthodontics.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Geographic Area	Had	Flu Vaccii	ne in Past Year ^a	Ever Had Pneumonia Vaccine ^b			
	n	%	95% Confidence Interval	n	%	95% Confidence Interval	
Michigan Total	7,701	68.1	(66.9 – 69.3)	7,483	64.5	(63.2 – 65.7)	
Region 1	2,782	64.5	(62.4 – 66.5)	2,689	62.3	(60.2 – 64.4)	
Livingston	96	73.6	(63.0 – 82.1)	92	65.0	(53.7 – 74.9)	
Macomb	502	66.8	(62.0 – 71.2)	487	62.3	(57.3 – 67.2)	
Monroe	102	63.7	(53.1 – 73.1)	102	65.1	(54.5 – 74.4)	
Oakland	755	67.9	(64.1 – 71.5)	726	64.3	(60.3 – 68.1)	
St. Clair	96	63.1	(51.9 – 73.0)	92	62.8	(51.2 – 73.1)	
Washtenaw	180	77.1	(69.6 – 83.2)	177	64.7	(55.9 – 72.6)	
City of Detroit	381	48.4	(42.6 – 54.3)	363	46.5	(40.6 – 52.6)	
Wayne exc. Detroit	655	67.6	(63.3 – 71.5)	635	71.1	(67.1 – 74.8)	
Region 2	422	66.2	(60.8 – 71.2)	413	61.4	(55.8 – 66.7)	
Genesee	309	65.6	(59.1 – 71.5)	306	60.2	(53.6 – 66.5)	
Lapeer	48	_ d		46	_ d		
Shiawassee	65	71.0	(58.7 – 80.9)	61	62.8	(49.1 – 74.7)	
Region 3	238	73.1	(66.4 – 78.9)	234	66.0	(59.0 – 72.4)	
Jackson	139	75.4	(66.6 – 82.5)	135	67.2	(57.9 – 75.3)	
Lenawee	99	69.8	(58.9 – 78.9)	99	64.4	(53.3 – 74.2)	
Region 4	470	73.6	(68.9 – 77.8)	455	68.7	(63.8 – 73.3)	
Barry-Eaton	171	74.8	(66.9 – 81.3)	166	72.2	(64.3 – 79.0)	
Mid-Michigan ^c	156	71.7	(63.2 – 78.9)	154	67.6	(59.0 – 75.1)	
Ingham	201	75.4	(68.1 – 81.4)	192	67.6	(59.8 – 74.6)	
Region 5	487	71.1	(66.4 – 75.4)	472	66.2	(61.2 – 70.8)	
Branch-Hillsdale-St. Joseph	140	61.6	(52.3 – 70.0)	136	54.2	(44.9 – 63.2)	
Calhoun	138	76.0	(67.4 – 82.9)	132	72.6	(63.5 – 80.1)	
Kalamazoo	209	74.4	(67.3 – 80.4)	204	70.3	(62.6 – 76.9)	
Region 6	256	59.7	(52.7 – 66.3)	248	58.3	(51.2 – 65.2)	
Van Buren-Cass	120	58.6	(48.7 – 67.9)	118	52.1	(42.2 – 61.8)	
Berrien	136	60.6	(50.6 – 69.7)	130	63.8	(53.5 – 73.0)	

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Table 26 Cont'd									
Geographic Area	Had I	Had Flu Vaccine in Past Year ^a			Ever Had Pneumonia Vaccine ^b				
	n		95% Confidence Interval	n	%	95% Confidence Interval			
Michigan Total	7,701	68.1	(66.9 – 69.3)	7,483	64.5	(63.2 – 65.7)			
Region 7	954	73.6	(70.3 – 76.6)	934	69.4	(65.9 – 72.7)			
Allegan	96	73.1	(61.9 – 81.9)	93	65.8	(54.1 - 75.8)			
Ionia	58	70.3	(55.7 – 81.6)	58	69.5	(55.0 - 80.9)			
Kent	555	73.0	(68.7 – 77.0)	544	70.4	(65.8 - 74.7)			
Mid-Michigan ^c	156	71.7	(63.2 – 78.9)	154	67.6	(59.0 – 75.1)			
Ottawa	187	74.7	(67.4 - 80.7)	182	68.4	(60.3 - 75.6)			
Region 8	423	72.4	(67.2 – 77.1)	408	67.3	(62.0 – 72.2)			
District #10	271	69.9	(63.5 – 75.6)	265	62.4	(55.7 - 68.7)			
Muskegon	152	77.1	(67.5 – 84.5)	143	76.7	(68.1 – 83.5)			
Region 9	533	72.8	(68.5 – 76.7)	515	66.1	(61.5 – 70.5)			
District #2	114	73.0	(63.2 – 80.9)	111	69.3	(59.2 – 77.8)			
District #4	126	73.2	(63.9 – 80.8)	124	67.4	(57.6 – 75.9)			
Northwest Michigan	148	76.7	(68.8 – 83.1)	140	64.0	(54.5 - 72.5)			
Benzie-Leelanau	67	64.9	(51.9 – 76.0)	64	68.4	(55.5 - 79.0)			
Grand Traverse	78	71.2	(59.5 - 80.7)	76	61.3	(48.9 - 72.4)			
Region 10	380	65.8	(60.4 - 70.9)	377	64.0	(58.5 – 69.1)			
Bay	90	73.2	(61.9 – 82.2)	91	65.2	(53.8 – 75.2)			
Huron	35	_ d		35	_ d				
Saginaw	161	66.0	(57.5 - 73.5)	158	69.2	(60.8 - 76.5)			
Sanilac	46	_ d		46	_ d				
Tuscola	48	_ d		47	_ d				
Region 11	373	71.1	(65.2 – 76.4)	362	66.0	(60.0 – 71.6)			
Central Michigan	217	70.7	(63.5 - 76.9)	210	65.4	(58.1 – 72.0)			
Midland	156	72.5	(61.5 – 81.3)	152	68.0	(56.8 - 77.4)			
Region 12	383	66.7	(61.2 – 71.7)	376	62.9	(57.3 – 68.2)			
Luce-Mackinac-Alger-Schoolcraft	36	_ d	, , , ,	35	_ d	,			
Western Upper Peninsula	72	69.9	(57.7 – 79.8)	71	69.8	(57.7 – 79.7)			
Delta-Menominee	79	58.5	(45.9 – 70.0)	79	60.2	(47.6 – 71.5)			
Chippewa	38	_ d	,	37	_ d	,			
Dickinson-Iron	76	58.7	(45.6 – 70.6)	74	63.0	(49.5 – 74.6)			
Marquette	82	78.0	(67.5 – 85.8)	80	60.5	(48.5 – 71.4)			

^a Among those aged 65 years and older, the proportion who reported that they had a flu vaccine, either by an injection in the arm or sprayed in the nose during the past 12 months.

b Among those aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^d Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

Table 27: Cholesterol Screening and Awareness Michigan BRFSS, 2003 and 2005 Combined									
Geographic Area	Cho	Cholesterol Ever Checked ^a			Told High Cholesterol ^b				
	n % 95% Confiden		95% Confidence Interval	n	%	95% Confidence Interval			
Michigan Total	15,430	80.0	(79.1 – 80.9)	13,209	38.6	(37.6 – 39.5)			
Region 1	6,131	81.9	(80.5 - 83.2)	5,329	38.1	(36.5 – 39.6)			
Livingston	249	86.5	(80.1 – 91.0)	223	41.0	(34.0 - 48.3)			
Macomb	963	82.1	(78.5 - 85.2)	844	40.7	(37.0 - 44.5)			
Monroe	221	79.2	(71.3 – 85.4)	184	40.3	(32.4 - 48.8)			
Oakland	1725	85.0	(82.4 - 87.2)	1543	40.1	(37.3 - 43.1)			
St. Clair	258	74.6	(66.4 – 81.3)	210	36.5	(29.5 – 44.2)			
Washtenaw	533	82.1	(77.1 – 86.3)	466	30.1	(25.6 - 35.0)			
City of Detroit	801	79.9	(76.0 - 83.3)	672	36.2	(32.0 - 40.7)			
Wayne exc. Detroit	1356	80.6	(77.5 - 83.3)	1169	37.2	(34.1 - 40.4)			
Region 2	929	82.5	(79.1 – 85.6)	799	40.2	(36.4 - 44.2)			
Genesee	657	82.3	(77.9 - 85.9)	565	41.6	(37.0 - 46.3)			
Lapeer	145	78.0	(68.4 - 85.4)	123	38.5	(29.5 - 48.3)			
Shiawassee	127	89.0	(81.8 – 93.5)	111	36.0	(26.2 - 47.0)			
Region 3	444	78.1	(72.5 – 82.9)	377	37.4	(32.2 – 43.0)			
Jackson	272	82.3	(75.2 - 87.7)	239	35.6	(29.3 - 42.4)			
Lenawee	172	71.4	(61.7 - 79.4)	138	40.9	(32.0 - 50.3)			
Region 4	1,036	79.2	(75.6 – 82.4)	880	39.4	(35.7 – 43.1)			
Barry-Eaton	341	79.2	(72.7 - 84.5)	289	41.3	(35.0 - 47.9)			
Mid-Michigan ^c	358	79.4	(73.3 - 84.5)	307	43.9	(37.8 - 50.2)			
Ingham	476	76.7	(71.1 – 81.6)	398	39.5	(34.0 - 45.2)			
Region 5	895	79.5	(75.8 – 82.9)	758	34.7	(30.9 - 38.6)			
Branch-Hillsdale-St. Joseph	256	75.1	(67.0 – 81.7)	214	40.2	(33.0 - 47.9)			
Calhoun	247	82.1	(75.3 - 87.3)	209	32.9	(26.4 - 40.3)			
Kalamazoo	392	80.7	(74.9 - 85.4)	335	32.6	(27.0 - 38.6)			
Region 6	513	72.0	(66.2 – 77.1)	425	35.6	(30.7 – 40.9)			
Van Buren-Cass	219	71.5	(62.4 - 79.2)	182	38.7	(31.0 - 47.1)			
Berrien	294	72.3	(64.6 – 78.8)	243	33.3	(27.1 – 40.2)			
Region 7	1,764	77.6	(74.9 - 80.2)	1,489	37.8	(35.0 - 40.7)			
Allegan	185	70.6	(61.6 – 78.3)	146	29.1	(21.8 – 37.6)			
Ionia	108	77.1	(65.3 – 85.8)	90	38.7	(28.6 – 49.7)			
Kent	877	80.0	(76.1 – 83.3)	748	37.2	(33.2 – 41.3)			
Mid-Michigan ^c	358	79.4	(73.3 – 84.5)	307	43.9	(37.8 – 50.2)			
Ottawa	455	77.8	(72.1 - 82.7)	391	36.4	(31.3 - 41.8)			

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Table 27 Cont'd									
Geographic Area	Cho	Cholesterol Ever Checked ^a			Told High Cholesterol ^b				
	n	%	95% Confidence Interval	n	%	95% Confidence Interval			
Michigan Total	15,430	80.0	(79.1 – 80.9)	13,209	38.6	(37.6 – 39.5)			
Region 8	808	76.6	(72.4 – 80.3)	678	40.5	(36.3 - 44.8)			
District #10	515	78.3	(73.2 – 82.6)	434	41.8	(36.6 - 47.2)			
Muskegon	293	73.9	(66.4 – 80.2)	244	38.2	(31.4 – 45.5)			
Region 9	906	81.5	(77.8 – 84.7)	778	42.7	(38.7 – 46.8)			
District #2	177	78.4	(69.1 – 85.5)	146	50.0	(40.4 - 59.6)			
District #4	207	83.8	(76.2 – 89.2)	177	44.8	(36.4 - 53.5)			
Northwest Michigan	268	81.8	(74.3 – 87.4)	236	40.9	(33.9 - 48.3)			
Benzie-Leelanau	102	81.9	(68.2 - 90.5)	91	44.5	(33.4 - 56.2)			
Grand Traverse	152	81.7	(72.7 – 88.2)	128	34.3	(25.5 - 44.4)			
Region 10	793	79.5	(75.2 – 83.3)	680	39.7	(35.5 – 44.1)			
Bay	186	72.8	(62.7 – 81.0)	156	45.6	(36.9 - 54.6)			
Huron	61	80.6	(64.2 – 90.6)	51	27.6	(16.2 – 42.9)			
Saginaw	356	84.4	(78.2 – 89.1)	314	39.2	(33.2 - 45.6)			
Sanilac	94	83.1	(69.4 – 91.5)	81	31.8	(21.2 – 44.9)			
Tuscola	96	70.9	(57.3 – 81.5)	78	46.5	(33.8 - 59.7)			
Region 11	540	76.1	(70.9 – 80.7)	447	38.7	(33.7 - 44.0)			
Central Michigan	369	76.1	(69.5 – 81.6)	305	44.7	(38.4 – 51.2)			
Midland	171	76.3	(66.8 – 83.7)	142	27.4	(20.2 - 36.0)			
Region 12	671	79.5	(74.8 – 83.4)	569	41.7	(37.2 - 46.3)			
Luce-Mackinac-Alger-Schoolcraft	83	85.0	(71.8 – 92.7)	72	43.9	(31.6 – 57.0)			
Western Upper Peninsula	146	74.7	(63.0 – 83.6)	122	39.7	(30.8 - 49.3)			
Delta-Menominee	148	80.6	(69.9 – 88.1)	126	38.8	(29.9 - 48.6)			
Chippewa	68	83.3	(66.2 – 92.8)	60	46.4	(31.9 – 61.5)			
Dickinson-Iron	101	82.7	(68.0 – 91.4)	90	44.4	(33.6 – 55.8)			
Marquette	125	74.8	(64.7 – 82.8)	99	40.4	(30.6 – 51.1)			

^a Among all respondents, the proportion who reported ever having had their blood cholesterol checked.

hamong those who ever had their blood cholesterol checked, the proportion who reported that a doctor, nurse, or other health professional had told them that their cholesterol was high.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Geographic Area	n 15,257 6,064	cked Within I	Past Five Years ^a 95% Confidence
	15,257	%	95% Confidence
	·		Interval
Michigan Total	6.064	76.1	(75.2 – 77.0)
Region 1	0,001	78.3	(76.9 – 79.7)
Livingston	248	83.1	(76.6 – 88.1)
Macomb	950	78.5	(74.8 – 81.8)
Monroe	221	77.8	(69.8 – 84.1)
Oakland	1,707	80.9	(78.2 – 83.4)
St. Clair	256	71.8	(63.6 – 78.7)
Washtenaw	530	77.0	(71.8 – 81.4)
City of Detroit	791	77.0	(73.0 – 80.6)
Wayne exc. Detroit	1,336	77.0	(73.8 – 80.0)
Region 2	921	79.0	(75.4 – 82.3)
Genesee	651	78.8	(74.2 – 82.7)
Lapeer	145	73.4	(63.8 – 81.2)
Shiawassee	125	86.9	(79.0 – 92.1)
Region 3	440	73.6	(67.9 – 78.6)
Jackson	268	77.0	(69.8 – 82.9)
Lenawee	172	68.2	(58.6 – 76.5)
Region 4	1022	74.6	(70.9 – 78.0)
Barry-Eaton	336	74.0	(67.3 – 79.7)
Mid-Michigan ^b	356	74.6	(68.3 – 79.9)
Ingham	469	72.8	(67.1 – 77.9)
Region 5	876	75.8	(71.9 – 79.4)
Branch-Hillsdale-St. Joseph	248	71.4	(63.3 – 78.3)
Calhoun	242	79.1	(72.2 – 84.7)
Kalamazoo	386	76.6	(70.6 – 81.7)
Region 6	511	69.5	(63.7 – 74.6)
Van Buren-Cass	219	68.4	(59.4 – 76.2)
Berrien	292	70.3	(62.7 – 76.9)
Region 7	1,743	74.2	(71.4 – 76.8)
Allegan	182	66.9	(57.8 – 74.8)
Ionia	105	72.3	(60.3 – 81.7)
Kent	866	76.8	(72.9 – 80.4)
Mid-Michigan ^⁵ Ottawa	356 451	74.6 74.3	(68.3 – 79.9) (68.6 – 79.3)

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Table 28 Cont'd				
Geographic Area	Checked Within Past Five Years ^a			
	n	%	95% Confidence Interval	
Michigan Total	15,257	76.1	(75.2 – 77.0)	
Region 8	799	72.9	(68.6 – 76.7)	
District #10	510	74.4	(69.3 - 79.0)	
Muskegon	289	70.3	(62.7 - 76.9)	
Region 9	902	76.6	(72.7 – 80.0)	
District #2	176	74.4	(64.9 - 82.0)	
District #4	206	79.6	(71.9 – 85.6)	
Northwest Michigan	267	77.4	(69.9 - 83.5)	
Benzie-Leelanau	102	77.1	(63.6 - 86.6)	
Grand Traverse	151	73.3	(63.8 – 81.1)	
Region 10	782	74.2	(69.8 - 78.2)	
Bay	183	67.5	(57.7 – 76.0)	
Huron	58	72.2	(55.0 - 84.7)	
Saginaw	354	78.2	(71.8 - 83.4)	
Sanilac	93	79.1	(65.7 - 88.2)	
Tuscola	94	69.5	(55.9 - 80.3)	
Region 11	537	71.4	(66.1 – 76.2)	
Central Michigan	366	70.7	(64.1 – 76.5)	
Midland	171	72.8	(63.4 – 80.5)	
Region 12	660	74.1	(69.4 - 78.3)	
Luce-Mackinac-Alger-Schoolcraft	82	82.0	(69.0 - 90.3)	
Western Upper Peninsula	145	65.1	(54.2 - 74.6)	
Delta-Menominee	148	71.9	(61.5 – 80.4)	
Chippewa	67	82.4	(65.4 - 92.0)	
Dickinson-Iron	97	78.2	(64.1 – 87.8)	
Marquette	121	73.4	(63.1 – 81.7)	

^a Among all respondents, the proportion who reported that they have had their blood cholesterol checked within the

past five years.

The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 29: Hypertension Awareness Michigan BRFSS, 2003 and 2005 Combined					
Geographic Area	Ev	Ever Told High Blood Pressure ^a			
	n	%	95% Confidence Interval		
Michigan Total	15,661	27.6	(26.8 – 28.4)		
Region 1	6,219	27.4	(26.2 – 28.7)		
Livingston	250	17.8	(13.5 – 23.1)		
Macomb	984	26.7	(23.8 – 29.8)		
Monroe	227	27.6	(21.7 – 34.5)		
Oakland	1,744	27.0	(24.6 – 29.5)		
St. Clair	259	34.4	(27.8 – 41.6)		
Washtenaw	539	21.8	(18.1 – 25.9)		
City of Detroit	819	35.9	(32.1 – 39.8)		
Wayne exc. Detroit	1372	24.4	(22.0 – 26.9)		
Region 2	939	27.4	(24.3 – 30.7)		
Genesee	664	29.9	(26.1 – 34.0)		
Lapeer	146	19.3	(13.5 – 26.8)		
Shiawassee	129	24.1	(17.1 – 32.8)		
Region 3	451	29.7	(25.3 – 34.6)		
Jackson	277	28.2	(22.8 – 34.2)		
Lenawee	174	32.2	(24.8 – 40.7)		
Region 4	1,061	26.4	(23.5 – 29.4)		
Barry-Eaton	345	26.2	(21.6 – 31.5)		
Mid-Michigan ^b	366	28.4	(23.7 – 33.5)		
Ingham	491	25.4	(21.3 – 30.1)		
Region 5	904	26.7	(23.6 – 30.0)		
Branch-Hillsdale-St. Joseph	260	27.9	(22.4 – 34.1)		
Calhoun	248	30.6	(24.7 – 37.3)		
Kalamazoo	396	23.5	(19.1 – 28.6)		
Region 6	518	30.9	(26.4 – 35.7)		
Van Buren-Cass	221	29.0	(22.7 – 36.2)		
Berrien	297	32.3	(26.4 – 38.8)		
Region 7	1,803	25.3	(23.1 – 27.5)		
Allegan	187	23.4	(17.4 – 30.7)		
Ionia	113	24.6	(17.3 – 33.7)		
Kent	897	26.6	(23.4 - 30.0)		
Mid-Michigan ^b	366	28.4	(23.7 – 33.5)		
Ottawa	465	22.7	(19.0 - 27.0)		

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Table 29 Cont'd				
Geographic Area	Ever Told High Blood Pressure ^a			
	n	%	95% Confidence Interval	
Michigan Total	15,661	27.6	(26.8 - 28.4)	
Region 8	827	28.6	(25.3 – 32.2)	
District #10	529	28.9	(24.8 - 33.4)	
Muskegon	298	28.1	(22.7 - 34.2)	
Region 9	917	30.0	(26.8 – 33.5)	
District #2	180	36.5	(28.5 - 45.4)	
District #4	211	35.2	(28.1 – 42.9)	
Northwest Michigan	270	25.1	(19.9 – 31.1)	
Benzie-Leelanau	102	25.7	(17.7 – 35.9)	
Grand Traverse	154	27.8	(20.7 - 36.3)	
Region 10	800	29.2	(25.7 – 32.9)	
Bay	185	29.7	(22.9 - 37.6)	
Huron	63	32.7	(21.2 - 46.7)	
Saginaw	360	28.7	(23.6 - 34.5)	
Sanilac	94	21.6	(14.0 - 31.7)	
Tuscola	98	33.7	(23.4 - 45.9)	
Region 11	545	27.1	(23.2 - 31.4)	
Central Michigan	371	30.4	(25.4 - 35.9)	
Midland	174	20.9	(15.4 – 27.6)	
Region 12	677	29.9	(26.4 - 33.8)	
Luce-Mackinac-Alger-Schoolcraft	83	18.0	(11.4 – 27.4)	
Western Upper Peninsula	147	29.7	(22.5 - 38.1)	
Delta-Menominee	148	30.1	(22.8 - 38.6)	
Chippewa	70	31.1	(20.3 - 44.6)	
Dickinson-Iron	103	34.4	(25.1 – 45.2)	
Marquette	126	34.3	(26.1 – 43.6)	

^a Among all respondents, the proportion who reported that they were ever told by a doctor that they have high blood pressure (HBP). Women who had HBP only during pregnancy and adults who were borderline hypertensive were considered to not have been diagnosed.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 30: Diabetes Michigan BRFSS, 2002-2006 Combined				
Geographic Area		Ever Told Diabetes ^a		
	n	%	95% Confidence Interval	
Michigan Total	32,168	8.1	(7.8 – 8.5)	
Region 1	12,240	8.0	(7.5 – 8.5)	
Livingston	496	6.6	(4.6 - 9.3)	
Macomb	1,940	7.9	(6.7 - 9.4)	
Monroe	477	7.5	(5.4 – 10.2)	
Oakland	3,307	6.4	(5.6 - 7.4)	
St. Clair	519	7.5	(5.6 – 10.1)	
Washtenaw	1,022	6.6	(5.1 - 8.5)	
City of Detroit	1,689	11.4	(9.8 – 13.2)	
Wayne exc. Detroit	2,743	8.0	(7.0 - 9.1)	
Region 2	1,837	8.7	(7.4 – 10.2)	
Genesee	1,316	9.2	(7.6 – 11.0)	
Lapeer	272	8.0	(5.2 – 12.2)	
Shiawassee	249	7.0	(4.2 – 11.4)	
Region 3	877	9.3	(7.3 – 11.6)	
Jackson	539	8.4	(6.3 – 11.3)	
Lenawee	338	10.6	(7.3 – 15.1)	
Region 4	2,057	7.2	(6.1 – 8.5)	
Barry-Eaton	644	6.9	(5.3 – 9.1)	
Mid-Michigan ^b	687	8.0	(5.8 – 10.8)	
Ingham	984	7.1	(5.6 – 8.9)	
Region 5	1,816	8.3	(7.1 – 9.8)	
Branch-Hillsdale-St. Joseph	530	10.4	(8.1 – 13.4)	
Calhoun	485	9.4	(7.0 – 12.4)	
Kalamazoo	801	6.3	(4.7 – 8.5)	
Region 6	1,065	7.4	(6.0 – 9.2)	
Van Buren-Cass	461	8.5	(6.2 – 11.7)	
Berrien	604	6.6	(4.9 - 8.8)	
Region 7	4,452	7.3	(6.5 – 8.3)	
Allegan	389	7.7	(5.3 – 11.0)	
Ionia	238	9.2	(5.7 – 14.5)	
Kent	2,691	7.4	(6.3 - 8.7)	
Mid-Michigan ^b	687	8.0	(5.8 – 10.8)	
Ottawa	876	6.3	(4.8 - 8.3)	

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Table 30 Cont'd				
Geographic Area		Ever Told Diabetes ^a		
	n	%	95% Confidence Interval	
Michigan Total	32,168	8.1	(7.8 – 8.5)	
Region 8	1,653	8.7	(7.4 – 10.2)	
District #10	1,068	8.0	(6.4 - 9.8)	
Muskegon	585	10.0	(7.8 - 12.7)	
Region 9	1,749	8.5	(7.2 – 10.0)	
District #2	343	9.9	(7.3 – 13.4)	
District #4	394	6.8	(4.7 - 9.9)	
Northwest Michigan	497	8.8	(6.4 - 12.1)	
Benzie-Leelanau	193	12.0	(8.0 - 17.7)	
Grand Traverse	322	6.3	(3.7 - 10.4)	
Region 10	1,559	9.3	(7.9 – 11.0)	
Bay	383	10.2	(7.4 - 13.8)	
Huron	132	3.9	(1.9 - 8.0)	
Saginaw	670	10.6	(8.3 - 13.3)	
Sanilac	171	6.0	(3.2 - 10.9)	
Tuscola	203	9.6	(5.6 – 16.0)	
Region 11	1,510	9.3	(7.8 – 11.2)	
Central Michigan	755	10.1	(8.1 – 12.5)	
Midland	755	7.8	(5.5 – 11.0)	
Region 12	1,353	8.9	(7.4 - 10.6)	
Luce-Mackinac-Alger-Schoolcraft	177	9.8	(6.1 – 15.3)	
Western Upper Peninsula	281	9.0	(6.1 – 13.0)	
Delta-Menominee	300	9.8	(6.6 – 14.5)	
Chippewa	138	7.5	(4.1 – 13.4)	
Dickinson-Iron	200	8.5	(5.3 – 13.4)	
Marquette	257	8.0	(5.0 - 12.5)	

^a The proportion who reported that they were ever told by a doctor that they have diabetes. Women who had diabetes only during pregnancy and adults who were diagnosed with pre-diabetes were considered to not have been diagnosed with diabetes.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 31: Heart Attack Michigan BRFSS, 2002, 2005, and 2006 Combined				
Geographic Area	E	Ever Told Heart Attack ^a		
	n	%	95% Confidence Interval	
Michigan Total	22,126	5.2	(4.9 - 5.5)	
Region 1	8,381	4.9	(4.4 – 5.5)	
Livingston	332	3.9	(2.2 - 6.7)	
Macomb	1,373	5.0	(3.9 - 6.3)	
Monroe	318	5.0	(2.9 - 8.5)	
Oakland	2,284	4.6	(3.8 - 5.6)	
St. Clair	351	5.0	(3.2 - 7.6)	
Washtenaw	704	3.7	(2.4 - 5.4)	
City of Detroit	1,119	6.3	(4.9 - 8.1)	
Wayne exc. Detroit	1,866	4.8	(3.8 - 6.0)	
Region 2	1,280	5.4	(4.2 - 6.8)	
Genesee	904	5.5	(4.1 – 7.2)	
Lapeer	196	6.8	(3.6 – 12.5)	
Shiawassee	180	3.2	(1.3 - 7.3)	
Region 3	611	6.7	(5.0 - 9.0)	
Jackson	369	6.1	(4.0 - 9.1)	
Lenawee	242	7.8	(5.1 – 11.8)	
Region 4	1,374	4.0	(3.1 – 5.2)	
Barry-Eaton	443	5.0	(3.3 - 7.4)	
Mid-Michigan ^b	440	3.9	(2.4 - 6.1)	
Ingham	649	3.4	(2.3 – 5.1)	
Region 5	1,249	5.8	(4.6 - 7.4)	
Branch-Hillsdale-St. Joseph	344	6.1	(4.0 - 9.1)	
Calhoun	352	6.3	(4.3 – 9.1)	
Kalamazoo	553	5.4	(3.6 – 8.1)	
Region 6	730	4.5	(3.2 - 6.3)	
Van Buren-Cass	306	5.5	(3.3 – 9.0)	
Berrien	424	3.8	(2.4 – 6.0)	
Region 7	3,047	3.9	(3.2 – 4.7)	
Allegan	269	6.5	(4.0 – 10.2)	
Ionia	158	3.8	(1.2 – 11.9)	
Kent	1,865	3.9	(3.0 - 5.0)	
Mid-Michigan ^b	440	3.9	(2.4 - 6.1)	
Ottawa	597	2.7	(1.7 - 4.2)	

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Table 31 Cont'd				
Geographic Area	Е	Ever Told Heart Attack ^a		
	n	%	95% Confidence Interval	
Michigan Total	22,126	5.2	(4.9 - 5.5)	
Region 8	1,145	6.0	(4.7 - 7.7)	
District #10	741	6.8	(5.0 - 9.1)	
Muskegon	404	4.7	(3.0 - 7.4)	
Region 9	1,225	6.9	(5.5 - 8.5)	
District #2	228	9.5	(6.1 - 14.4)	
District #4	293	6.8	(4.4 - 10.4)	
Northwest Michigan	349	6.6	(4.3 - 9.9)	
Benzie-Leelanau	133	7.1	(3.6 - 13.5)	
Grand Traverse	222	4.6	(2.6 - 8.1)	
Region 10	1,045	5.5	(4.3 - 7.1)	
Bay	244	3.1	(1.6 - 5.9)	
Huron	81	3.8	(1.5 - 9.4)	
Saginaw	467	7.0	(4.9 - 9.8)	
Sanilac	118	4.1	(1.7 - 9.5)	
Tuscola	135	6.9	(3.7 - 12.8)	
Region 11	1,093	7.7	(6.0 - 9.9)	
Central Michigan	524	8.0	(5.9 – 10.8)	
Midland	569	7.2	(4.4 - 11.4)	
Region 12	946	5.7	(4.3 - 7.4)	
Luce-Mackinac-Alger-Schoolcraft	121	6.2	(2.9 - 12.9)	
Western Upper Peninsula	198	3.9	(1.9 - 7.8)	
Delta-Menominee	210	4.2	(2.1 - 8.6)	
Chippewa	88	7.5	(3.3 – 16.1)	
Dickinson-Iron	148	9.3	(5.6 – 15.0)	
Marquette	181	4.9	(2.5 - 9.6)	

^a Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial

infarction.

b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 32: Angina or Coronary Heart Disease Michigan BRFSS, 2002, 2005, and 2006 Combined				
Geographic Area		Ever Told Angina or Coronary Heart Disease ^a		
	n	%	95% Confidence Interval	
Michigan Total	22,054	5.2	(4.9 - 5.5)	
Region 1	8,350	5.1	(4.6 – 5.7)	
Livingston	331	3.0	(1.6 – 5.7)	
Macomb	1,363	6.1	(4.9 - 7.5)	
Monroe	314	5.3	(3.4 - 8.2)	
Oakland	2,279	5.1	(4.3 - 6.2)	
St. Clair	352	4.3	(2.4 - 7.6)	
Washtenaw	699	2.5	(1.6 - 3.8)	
City of Detroit	1,124	6.2	(4.8 - 8.1)	
Wayne exc. Detroit	1,854	4.9	(4.0 - 6.1)	
Region 2	1,276	5.2	(4.1 – 6.6)	
Genesee	902	4.8	(3.6 - 6.3)	
Lapeer	194	6.2	(3.0 – 12.1)	
Shiawassee	180	6.3	(3.4 – 11.5)	
Region 3	608	4.2	(2.9 - 6.2)	
Jackson	368	4.5	(2.7 - 7.3)	
Lenawee	240	3.9	(2.2 - 6.7)	
Region 4	1,371	3.7	(2.8 – 4.8)	
Barry-Eaton	442	4.6	(3.0 - 7.0)	
Mid-Michigan ^b	440	3.4	(2.2 - 5.4)	
Ingham	645	3.6	(2.5 - 5.3)	
Region 5	1,234	5.0	(3.9 - 6.3)	
Branch-Hillsdale-St. Joseph	343	5.9	(3.9 - 9.0)	
Calhoun	343	6.5	(4.4 - 9.5)	
Kalamazoo	548	3.5	(2.2 - 5.4)	
Region 6	728	5.6	(4.1 – 7.5)	
Van Buren-Cass	304	6.8	(4.3 – 10.6)	
Berrien	424	4.7	(3.2 - 7.0)	
Region 7	3,039	4.2	(3.4 – 5.0)	
Allegan	265	4.1	(2.5 - 6.8)	
Ionia	158	3.3	(0.9 – 11.9)	
Kent	1,865	4.6	(3.6 - 5.8)	
Mid-Michigan ^b	440	3.4	(2.2 - 5.4)	
Ottawa	595	3.3	(2.1 - 5.0)	

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Table 32 Cont'd				
Geographic Area		Ever Told Angina or Coronary Heart Disease ^a		
	n	%	95% Confidence Interval	
Michigan Total	22,054	5.2	(4.9 - 5.5)	
Region 8	1,144	5.8	(4.5 - 7.4)	
District #10	740	6.8	(5.0 - 9.1)	
Muskegon	404	4.1	(2.6 - 6.5)	
Region 9	1,223	6.6	(5.3 – 8.2)	
District #2	227	9.3	(6.2 - 13.9)	
District #4	292	7.0	(4.3 – 11.1)	
Northwest Michigan	349	5.4	(3.5 - 8.4)	
Benzie-Leelanau	133	6.8	(3.5 - 12.9)	
Grand Traverse	222	5.0	(2.8 - 8.8)	
Region 10	1,045	5.5	(4.2 - 7.2)	
Bay	242	6.4	(4.0 - 10.2)	
Huron	83	5.1	(2.2 – 11.1)	
Saginaw	466	5.0	(3.3 - 7.5)	
Sanilac	120	9.1	(4.1 – 18.9)	
Tuscola	134	3.0	(1.2 - 7.4)	
Region 11	1,092	7.9	(6.2 – 10.1)	
Central Michigan	521	9.2	(7.0 - 12.2)	
Midland	571	5.4	(3.3 - 8.7)	
Region 12	944	5.9	(4.5 - 7.6)	
Luce-Mackinac-Alger-Schoolcraft	119	4.3	(1.8 - 9.7)	
Western Upper Peninsula	197	6.3	(3.5 – 11.0)	
Delta-Menominee	211	5.7	(3.2 - 10.1)	
Chippewa	88	6.6	(2.9 - 14.5)	
Dickinson-Iron	148	6.0	(3.3 - 10.5)	
Marquette	181	6.1	(3.4 - 10.9)	

^a Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

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Table 33: Stroke Michigan BRFSS, 2002, 2005, and 2006 Combined				
Geographic Area		Ever Told Stroke ^a		
	n	%	95% Confidence Interval	
Michigan Total	22,168	3.1	(2.9 - 3.4)	
Region 1	8,395	3.1	(2.7 – 3.5)	
Livingston	333	1.9	(0.9 - 4.0)	
Macomb	1,373	3.3	(2.4 - 4.4)	
Monroe	320	2.9	(1.2 - 6.7)	
Oakland	2,290	3.0	(2.2 - 3.9)	
St. Clair	349	2.7	(1.5 - 4.8)	
Washtenaw	703	2.0	(1.1 - 3.5)	
City of Detroit	1,128	4.5	(3.4 - 6.0)	
Wayne exc. Detroit	1,864	2.6	(1.9 - 3.5)	
Region 2	1,287	3.1	(2.3 - 4.2)	
Genesee	910	2.8	(1.9 - 4.0)	
Lapeer	195	4.5	(2.3 - 8.4)	
Shiawassee	182	3.3	(1.3 - 7.8)	
Region 3	607	4.6	(3.1 – 6.9)	
Jackson	368	4.5	(2.8 - 7.2)	
Lenawee	239	4.8	(2.3 - 9.7)	
Region 4	1,375	2.4	(1.7 – 3.3)	
Barry-Eaton	442	3.2	(1.9 - 5.6)	
Mid-Michigan ^b	444	1.1	(0.6 - 2.2)	
Ingham	648	2.3	(1.4 - 3.7)	
Region 5	1,249	3.8	(2.8 – 5.0)	
Branch-Hillsdale-St. Joseph	346	4.8	(3.0 - 7.5)	
Calhoun	348	3.1	(1.8 - 5.3)	
Kalamazoo	555	3.6	(2.2 - 5.9)	
Region 6	733	2.9	(1.9 – 4.4)	
Van Buren-Cass	307	3.6	(1.9 - 6.8)	
Berrien	426	2.4	(1.4 - 4.1)	
Region 7	3,054	2.4	(1.9 – 3.1)	
Allegan	268	1.7	(0.7 - 3.9)	
Ionia	159	2.2	(0.9 - 5.3)	
Kent	1,871	2.7	(2.0 - 3.7)	
Mid-Michigan ^b	444	1.1	(0.6 - 2.2)	
Ottawa	597	2.7	(1.6 - 4.3)	

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Table 33 Cont'd				
Geographic Area		Ever Told Stroke ^a		
	n	%	95% Confidence Interval	
Michigan Total	22,168	3.1	(2.9 - 3.4)	
Region 8	1,149	4.3	(3.1 - 5.9)	
District #10	745	4.2	(2.8 - 6.1)	
Muskegon	404	4.5	(2.5 - 7.9)	
Region 9	1,227	3.9	(2.9 - 5.1)	
District #2	229	6.0	(3.5 - 10.0)	
District #4	294	3.1	(1.7 - 5.5)	
Northwest Michigan	350	4.0	(2.3 - 7.0)	
Benzie-Leelanau	133	3.6	(1.5 - 8.5)	
Grand Traverse	221	2.5	(1.2 - 5.4)	
Region 10	1,046	3.3	(2.4 - 4.6)	
Bay	242	1.1	(0.4 - 2.9)	
Huron	84	3.3	(1.3 - 7.9)	
Saginaw	465	4.4	(2.9 - 6.8)	
Sanilac	119	3.1	(0.8 – 11.1)	
Tuscola	136	3.5	(1.6 - 7.5)	
Region 11	1,096	2.4	(1.5 - 3.7)	
Central Michigan	524	2.7	(1.6 - 4.5)	
Midland	572	1.7	(0.6 - 4.4)	
Region 12	950	3.1	(2.2 - 4.3)	
Luce-Mackinac-Alger-Schoolcraft	122	7.2	(3.6 - 13.9)	
Western Upper Peninsula	197	2.9	(1.5 - 5.7)	
Delta-Menominee	213	1.9	(0.7 - 4.6)	
Chippewa	89	4.5	(1.6 – 12.3)	
Dickinson-Iron	147	2.6	(1.0 - 6.5)	
Marquette	182	1.4	(0.5 - 3.6)	

^a Among all adults, the proportion who had ever been told by a doctor that they had a stroke.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 34: Asthma	
Michigan BRFSS, 2002-2006 Co	mbined

Michigan BRFSS, 2002-2006 Combined							
Geographic Area	Ev	Ever Told Have Asthma ^a			Still Have Asthma ^b		
	n	%	95% Confidence Interval	n	%	95% Confidence Interval	
Michigan Total	32,119	13.6	(13.1 – 14.1)	31,981	9.0	(8.6 - 9.4)	
Region 1	12,222	14.6	(13.8 – 15.4)	12,167	9.4	(8.7 – 10.0)	
Livingston	495	15.3	(12.0 - 19.3)	495	9.3	(6.9 - 12.4)	
Macomb	1,937	13.0	(11.2 - 14.9)	1,927	8.2	(6.9 - 9.9)	
Monroe	473	11.1	(8.2 - 14.9)	471	7.9	(5.6 – 11.1)	
Oakland	3,304	14.3	(12.8 – 15.9)	3,286	8.5	(7.4 - 9.8)	
St. Clair	517	14.0	(10.8 - 18.0)	515	9.7	(7.0 - 13.2)	
Washtenaw	1,022	14.6	(12.2 - 17.4)	1,018	10.1	(8.1 – 12.6)	
City of Detroit	1,688	16.3	(14.2 – 18.5)	1,683	11.5	(9.8 - 13.5)	
Wayne exc. Detroit	2,739	15.3	(13.6 – 17.0)	2,725	9.4	(8.2 – 10.9)	
Region 2	1,840	13.6	(11.8 – 15.7)	1,834	8.6	(7.1 – 10.2)	
Genesee	1,319	13.3	(11.2 – 15.7)	1,314	8.6	(6.9 - 10.6)	
Lapeer	273	13.4	(9.3 - 18.8)	272	7.4	(4.6 – 11.8)	
Shiawassee	248	15.7	(10.7 – 22.4)	248	9.7	(6.0 – 15.3)	
Region 3	875	17.0	(14.3 – 20.1)	868	13.6	(11.2 – 16.5)	
Jackson	538	17.3	(14.1 – 21.2)	532	14.2	(11.2 - 17.7)	
Lenawee	337	16.6	(12.2 - 22.1)	336	12.8	(8.9 - 17.9)	
Region 4	2,053	13.5	(11.9 – 15.3)	2,046	9.9	(8.5 – 11.4)	
Barry-Eaton	643	13.5	(10.6 – 16.9)	640	10.1	(7.6 – 13.2)	
Mid-Michigan ^c	686	12.6	(10.1 – 15.6)	684	9.5	(7.3 – 12.2)	
Ingham	982	13.8	(11.5 – 16.5)	979	9.6	(7.6 – 11.9)	
Region 5	1,810	13.0	(11.3 – 15.0)	1,800	8.7	(7.3 – 10.3)	
Branch-Hillsdale-St. Joseph	527	13.4	(10.2 – 17.3)	524	10.2	(7.4 - 13.9)	
Calhoun	483	13.0	(10.0 – 16.8)	479	8.7	(6.4 – 11.8)	
Kalamazoo	800	12.9	(10.3 – 16.0)	797	7.6	(5.8 – 10.0)	
Region 6	1,060	10.6	(8.7 – 13.0)	1,058	6.0	(4.6 - 7.7)	
Van Buren-Cass	460	8.8	(6.1 – 12.5)	460	5.0	(3.3 - 7.5)	
Berrien	600	12.0	(9.3 - 15.3)	598	6.7	(4.8 - 9.2)	
Region 7	4,448	12.5	(11.3 – 13.8)	4,433	8.1	(7.1 – 9.2)	
Allegan	389	10.2	(7.3 – 14.1)	388	7.3	(5.0 – 10.7)	
Ionia	237	10.9	(6.8 - 16.9)	236	6.1	(3.2 – 11.4)	
Kent	2,690	13.6	(11.9 – 15.5)	2,679	8.3	(7.0 - 9.8)	
Mid-Michigan ^c	686	12.6	(10.1 – 15.6)	684	9.5	(7.3 – 12.2)	
Ottawa	874	11.7	(9.4 - 14.5)	873	8.5	(6.5 - 11.1)	

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Table 34 Cont'd						
Geographic Area	Ever Told Have Asthma ^a			Still Have Asthma ^b		
	n	%	95% Confidence Interval	n	%	95% Confidence Interval
Michigan Total	32,119	13.6	(13.1 – 14.1)	31,981	9.0	(8.6 - 9.4)
Region 8	1,648	11.8	(10.1 – 13.8)	1,642	7.3	(6.1 – 8.8)
District #10	1,066	12.5	(10.4 – 15.0)	1,064	8.9	(7.2 – 11.0)
Muskegon	582	10.7	(8.2 - 14.0)	578	4.8	(3.3 - 6.8)
Region 9	1,745	13.8	(12.0 – 15.9)	1,735	9.8	(8.3 – 11.6)
District #2	343	15.8	(11.7 – 21.1)	339	11.4	(8.1 – 15.8)
District #4	391	12.6	(9.0 - 17.4)	388	8.8	(5.8 – 13.0)
Northwest Michigan	496	13.2	(10.1 – 16.9)	493	9.3	(6.8 - 12.7)
Benzie-Leelanau	193	14.0	(8.9 - 21.4)	193	12.1	(7.3 - 19.4)
Grand Traverse	322	14.1	(10.3 – 19.0)	322	8.7	(5.8 – 12.9)
Region 10	1,558	13.3	(11.3 – 15.5)	1,550	8.7	(7.1 – 10.6)
Bay	382	15.4	(11.1 – 21.1)	379	8.1	(5.2 – 12.3)
Huron	132	12.4	(6.8 - 21.4)	131	11.0	(5.7 - 20.2)
Saginaw	670	11.0	(8.6 – 13.9)	666	7.2	(5.3 - 9.8)
Sanilac	172	14.0	(8.3 - 22.5)	172	11.4	(6.2 – 19.9)
Tuscola	202	17.3	(11.7 – 24.9)	202	11.1	(6.6 – 18.1)
Region 11	1,510	12.2	(10.3 – 14.3)	1,503	8.3	(6.7 – 10.1)
Central Michigan	756	12.6	(10.3 – 15.4)	751	8.8	(6.9 – 11.2)
Midland	754	11.4	(8.5 – 15.0)	752	7.1	(4.9 - 10.4)
Region 12	1,350	11.6	(9.8 - 13.7)	1,345	8.6	(7.0 - 10.5)
Luce-Mackinac-Alger-Schoolcraft	177	14.2	(9.1 – 21.5)	176	12.4	(7.7 - 19.3)
Western Upper Peninsula	279	9.6	(6.4 – 14.2)	279	4.7	(2.7 – 8.1)
Delta-Menominee	299	12.9	(9.2 - 17.7)	297	9.5	(6.3 – 14.0)
Chippewa	138	9.6	(4.9 – 17.9)	137	8.7	(4.2 – 17.2)
Dickinson-Iron	200	11.1	(6.7 – 17.8)	200	8.9	(5.0 – 15.5)
Marquette	257	12.0	(8.3 – 17.0)	256	8.6	(5.6 – 12.9)

^a The proportion who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.

b Among all respondents, the proportion who reported that they still had asthma.

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Table 35: Arthritis Michigan BRFSS, 2003 and 2005 Combined					
Geographic Area		Doctor-	Doctor-Diagnosed Arthritis ^a		
	n	%	95% Confidence Interval		
Michigan Total	15,522	31.2	(30.4 – 32.0)		
Region 1	6,159	29.9	(28.6 – 31.2)		
Livingston	247	27.3	(21.9 – 33.3)		
Macomb	975	33.2	(30.0 - 36.6)		
Monroe	226	33.8	(27.3 – 41.0)		
Oakland	1,724	27.9	(25.5 - 30.3)		
St. Clair	258	36.2	(29.6 - 43.4)		
Washtenaw	536	21.3	(17.9 – 25.2)		
City of Detroit	809	32.8	(29.2 - 36.7)		
Wayne exc. Detroit	1,363	29.9	(27.3 - 32.7)		
Region 2	930	34.2	(30.9 - 37.7)		
Genesee	655	34.7	(30.7 – 38.9)		
Lapeer	146	37.7	(29.6 – 46.5)		
Shiawassee	129	28.3	(20.2 – 38.1)		
Region 3	444	30.5	(26.2 – 35.3)		
Jackson	272	33.4	(27.6 - 39.7)		
Lenawee	172	26.0	(19.7 – 33.5)		
Region 4	1,051	32.0	(29.0 – 35.2)		
Barry-Eaton	341	29.5	(24.6 – 35.0)		
Mid-Michigan ^b	363	37.2	(31.9 – 42.9)		
Ingham	486	30.8	(26.4 - 35.5)		
Region 5	895	31.0	(27.8 – 34.4)		
Branch-Hillsdale-St. Joseph	254	36.6	(30.3 - 43.5)		
Calhoun	247	28.1	(22.5 - 34.4)		
Kalamazoo	394	29.4	(24.8 – 34.6)		
Region 6	515	25.3	(21.5 – 29.5)		
Van Buren-Cass	220	25.6	(19.9 – 32.3)		
Berrien	295	25.1	(20.2 – 30.7)		
Region 7	1,791	28.4	(26.2 – 30.7)		
Allegan	187	27.9	(21.6 – 35.2)		
Ionia	112	27.7	(20.0 – 36.9)		
Kent	891	27.0	(23.9 – 30.3)		
Mid-Michigan ^b	363	37.2	(31.9 – 42.9)		
Ottawa	462	29.7	(25.4 – 34.4)		

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Table 35 Cont'd					
Geographic Area		Doctor-Diagnosed Arthritis ^a			
	n	%	95% Confidence Interval		
Michigan Total	15,522	31.2	(30.4 – 32.0)		
Region 8	819	34.7	(31.1 – 38.5)		
District #10	524	35.3	(30.8 – 40.1)		
Muskegon	295	33.7	(27.9 - 39.9)		
Region 9	913	34.5	(31.1 – 38.0)		
District #2	180	39.1	(31.3 – 47.6)		
District #4	209	37.1	(29.9 – 45.0)		
Northwest Michigan	269	37.5	(31.3 – 44.1)		
Benzie-Leelanau	102	22.6	(15.5 – 31.7)		
Grand Traverse	153	28.9	(21.5 – 37.6)		
Region 10	793	36.5	(32.7 - 40.5)		
Bay	183	28.5	(21.8 – 36.4)		
Huron	63	34.4	(22.6 - 48.6)		
Saginaw	356	39.0	(33.1 – 45.1)		
Sanilac	93	43.7	(32.1 – 56.1)		
Tuscola	98	37.6	(27.1 – 49.4)		
Region 11	542	31.1	(26.9 - 35.6)		
Central Michigan	369	36.9	(31.4 – 42.7)		
Midland	173	19.9	(14.5 – 26.6)		
Region 12	670	36.2	(32.2 - 40.3)		
Luce-Mackinac-Alger-Schoolcraft	81	35.8	(25.0 - 48.3)		
Western Upper Peninsula	145	37.2	(28.9 – 46.2)		
Delta-Menominee	147	38.5	(29.8 – 48.0)		
Chippewa	69	28.3	(18.3 – 41.0)		
Dickinson-Iron	102	41.9	(31.6 – 52.9)		
Marquette	126	32.8	(24.9 – 41.8)		

^a The proportion who reported ever being told by a health care professional that they had some form of arthritis,

rheumatoid arthritis, gout, lupus, or fibromyalgia.

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